

*Unit 3. South Santiam River Subbasin (HUC4# 17090006)*

This subbasin contains eight watersheds, six of which are occupied by this ESU and encompass approximately 766 sq mi (1,984 sq km). Fish distribution and habitat use data from ODFW identify approximately 230 mi (370 km) of occupied riverine habitat in these watersheds (ODFW, 2003a,b). Two watersheds in the upper Middle Santiam River (Quartzville Creek and Middle Santiam River) are blocked by Green Peter Dam. Myers *et al.* (2003) identified one demographically independent population (South Santiam River) in this subbasin. The Team concluded that all of the occupied areas contain spawning, rearing, or migration PCEs for this ESU and identified several management activities that may affect the PCEs, including agriculture, dams, forestry, and roadbuilding. The Team also concluded that habitat areas in all six of the occupied watersheds in this subbasin warrant a high rating for conservation value to the ESU (NMFS, 2004a). The Team did not identify any unoccupied areas in this subbasin that may be essential for the conservation of the ESU.

*Unit 4. Middle Willamette River Subbasin (HUC4# 17090007)*

This subbasin consists of four occupied watersheds encompassing approximately 712 sq mi (1,844 sq km). Fish distribution and habitat use data from ODFW identify approximately 175 mi (282 km) of occupied riverine habitat (all rearing/migration) in these watersheds (ODFW, 2003a,b). Myers *et al.* (2003) identified one demographically independent population (North Santiam River) that spawns in this subbasin, although three populations use this subbasin for rearing/migration. The Team concluded that all of the occupied areas contain spawning, rearing, or migration PCEs for this ESU and identified several management activities that may affect the PCEs, including agriculture, channel modifications, roadbuilding, and urbanization. The Team also concluded that all of the tributary habitat areas in the four watersheds warrant a low rating for conservation value to the ESU (NMFS, 2004a). However, that assessment pertained solely to the tributary streams in these watersheds (*e.g.*, Ash, Rickreall, and Harvey creeks), not the mainstem Willamette River nor the Mill Creek reaches connecting to the North Santiam River. The Team concluded that all reaches of the Willamette River within this subbasin constitute a high value rearing and

migration corridor. These high value reaches connect all populations and watersheds in this ESU with downstream reaches and the ocean. The Team did not identify any unoccupied areas in this subbasin that may be essential for the conservation of the ESU.

*Unit 5. Yamhill River Subbasin (HUC4# 17090008)*

This subbasin contains seven occupied watersheds encompassing approximately 772 sq mi (1,999 sq km). Fish distribution and habitat use data from ODFW identify approximately 319 mi (513 km) of occupied riverine habitat (all rearing/migration) in these watersheds (ODFW, 2003a,b). Myers *et al.* (2003) did not identify a demographically independent population in this subbasin. These authors noted that there is considerable debate about the origin of naturally spawning winter-run fish currently found in several westside tributaries and went on to state that (with the exception of the Tualatin River) “there is little evidence to suggest that sustained spawning aggregations of steelhead may have existed historically in the westside tributaries of the Willamette River basin. Furthermore, it is unlikely that these tributaries, individually or collectively were large enough to constitute a demographically independent population.” While there is uncertainty regarding the population status of anadromous *O. mykiss* in westside watersheds, the Team determined that it was likely that PCEs exist in these seven watersheds and identified several management activities that may affect the PCEs, including agriculture, forestry, roadbuilding, and urbanization. The Team noted that, given the limited number of populations in this ESU, habitat in this subbasin may provide some conservation benefits to the ESU (*e.g.*, as a buffer against a catastrophic event affecting Cascade watersheds). In that context, the Team concluded that habitat areas in the Upper South Yamhill River watershed may have the greatest conservation value in this subbasin and therefore assigned them a medium conservation value while habitat areas in the remaining six watersheds warrant a low conservation value to the ESU. The Team did not identify any unoccupied areas in this subbasin that may be essential for the conservation of the ESU.

*Unit 6. Molalla/Pudding River Subbasin (HUC4# 17090009)*

This subbasin contains six occupied watersheds and encompasses

approximately 875 sq mi (2,266 sq km). Fish distribution and habitat use data from ODFW identify approximately 284 mi (457 km) of occupied riverine habitat in these watersheds (ODFW, 2003a,b). Myers *et al.* (2003) identified one demographically independent population (Molalla River) that spawns in this subbasin. The Team concluded that all of the occupied areas contain spawning, rearing, or migration PCEs for this ESU and identified several management activities that may affect the PCEs, including agriculture, channel modifications, roadbuilding, and urbanization. The Team also concluded that habitat areas in one of the watersheds warrant a high rating, those in three warrant a medium rating, and those in two warrant a low rating for conservation value to the ESU (NMFS, 2004a). The Team did not identify any unoccupied areas in this subbasin that may be essential for the conservation of the ESU.

*Unit 7. Tualatin River Subbasin (HUC4# 17090010)*

This subbasin contains five occupied watersheds encompassing approximately 709 sq mi (1,836 sq km). Fish distribution and habitat use data from ODFW identify approximately 298 mi (480 km) of occupied riverine habitat (all rearing/migration) in these watersheds (ODFW, 2003a,b). Myers *et al.* (2003) did not identify a demographically independent population in this subbasin. These authors noted that there is considerable debate about the origin of naturally spawning winter-run fish currently found in several westside tributaries and went on to state that (with the exception of the Tualatin River) “there is little evidence to suggest that sustained spawning aggregations of steelhead may have existed historically in the westside tributaries of the Willamette River basin. Furthermore, it is unlikely that these tributaries, individually or collectively were large enough to constitute a demographically independent population.” While there is uncertainty regarding the population status of anadromous *O. mykiss* in westside watersheds, the Team determined that it was likely that PCEs exist in these five watersheds and identified several management activities that may affect the PCEs, including agriculture, channel modifications, forestry, roadbuilding, and urbanization. The Team noted that, given the limited number of populations in this ESU, habitat in this subbasin may provide some conservation benefits to the ESU (*e.g.*, as a buffer against a catastrophic event affecting Cascade watersheds). In

that context, the Team concluded that habitat areas in the Gales Creek watershed may have the greatest conservation value in this subbasin and therefore assigned them a medium conservation value while habitat areas in the remaining four watersheds warrant a low conservation value to the ESU. The Team did not identify any unoccupied areas in this subbasin that may be essential for the conservation of the ESU.

#### *Unit 8. Lower Willamette/Columbia River Corridor*

For the purposes of describing units of critical habitat designation for this ESU, we define the lower Willamette/Columbia River corridor as that segment from the confluence of the Willamette and Clackamas rivers to the Pacific Ocean. This corridor also includes the Multnomah Channel portion of the Lower Willamette River. Watersheds downstream of the Clackamas River subbasin (Johnson Creek and Columbia Slough/Willamette River watersheds) are outside the spawning range of this ESU and likely used in a limited way as juvenile rearing habitat for this ESU. Fish distribution and habitat use data from ODFW identify approximately 138 mi (223 km) of occupied riverine and estuarine habitat in this corridor (ODFW, 2003a,b). After reviewing the best available scientific data for all of the areas within the freshwater and estuarine range of this ESU, the Team concluded that the lower Willamette/Columbia River corridor was of high conservation value to the ESU. The Team noted that this corridor connects habitat areas in every watershed and population in this ESU with the ocean and is used by rearing/migrating juveniles and migrating adults. The Columbia River estuary is a particularly important area for this ESU as both juveniles and adults make the critical physiological transition between life in freshwater and marine habitats (Marriott *et al.*, 2002). Management activities that may affect the PCEs in this corridor include channel modifications, roadbuilding, river/estuary traffic, roadbuilding, urbanization, and wetland loss and removal.

#### **Application of ESA Section 4(b)(2)**

The foregoing discussion describes those areas that are eligible for designation as critical habitat—the specific areas that fall within the ESA section 3(5)(A) definition of critical habitat, minus those lands owned or controlled by the Department of Defense, or designated for its use, that are covered by an INRMP that we have determined in writing provides a benefit

to the species. The application of section 4(b)(2) was a major concern of those commenting on the ANPR (68 FR 55926; September 29, 2003). Many commenters requested that we describe the process used—in particular the economic analysis—as part of our proposed rulemaking.

Specific areas eligible for designation are not automatically designated as critical habitat. Section 4(b)(2) of the ESA requires that the Secretary first considers the economic impact, impact on national security, and any other relevant impact. The Secretary has the discretion to exclude an area from designation if he determines the benefits of exclusion (that is, avoiding the impact that would result from designation), outweigh the benefits of designation. The Secretary may not exclude an area from designation if exclusion will result in the extinction of the species. Because the authority to exclude is discretionary, exclusion is not required for any areas.

In this proposed rule, the Secretary has applied his statutory discretion to exclude areas from critical habitat for several different reasons. To be consistent, we used the fifth field watershed as the unit for exclusion in each case. However, the agency is asking for public comment on whether considering exclusions on a stream-by-stream approach would be more appropriate.

#### *Impacts to Tribes*

We believe there is very little benefit to designating critical habitat on Indian lands. Although there is a broad array of activities on Indian lands that may trigger section 7, Indian lands comprise only a minor portion (less than 3 percent) of the total habitat under consideration for these ESUs. Depending upon the ESU, Indian lands account for zero to 13 percent of the total habitat area for these ESUs. (For nine ESUs the Indian lands total less than one percent, with only one ESU greater than five percent. These percentages are likely overestimates as they include all habitat area within reservation boundaries. In many cases, a considerable portion of the land within the reservation boundaries is no longer held in trust for the tribe or in fee status by individual tribal members). Further, in more than 15 letters to NMFS—several in response to the agency's ANPR (68 FR 55926; September 29, 2003)—the tribes have documented how they are already working to address the habitat needs of the species on these lands as well as in the larger ecosystem, and are fully aware of the conservation value of their lands.

There are several benefits to excluding Indian lands. The longstanding and distinctive relationship between the Federal and tribal governments is defined by treaties, statutes, executive orders, judicial decisions, and agreements, which differentiate tribal governments from the other entities that deal with, or are affected by, the Federal government. This relationship has given rise to a special Federal trust responsibility involving the legal responsibilities and obligations of the United States toward Indian Tribes and the application of fiduciary standards of due care with respect to Indian lands, tribal trust resources, and the exercise of tribal rights. Pursuant to these authorities lands have been retained by Indian Tribes or have been set aside for tribal use. These lands are managed by Indian Tribes in accordance with tribal goals and objectives within the framework of applicable treaties and laws.

In addition to the distinctive trust relationship, for Pacific salmon in the Northwest, there is a unique partnership between the Federal government and Indian tribes regarding salmon management. Northwest Indian tribes are regarded as “co-managers” of the salmon resource, along with Federal and state managers. This co-management relationship evolved as a result of numerous court decisions clarifying the tribes' treaty right to take fish in their usual and accustomed places.

The tribes have stated in letters and meetings that designation of Indian lands as critical habitat will undermine long-term working relationships and reduce the capacity of tribes to participate at current levels in the many and varied forums across four states addressing ecosystem management and conservation of fisheries resources.

The benefits of excluding Indian lands from designation include: (1) The furtherance of established national policies, our Federal trust obligations and our deference to the tribes in management of natural resources on their lands; (2) the maintenance of effective long-term working relationships to promote the conservation of salmonids on an ecosystem-wide basis across four states; (3) the allowance for continued meaningful collaboration and cooperation in scientific work to learn more about the conservation needs of the species on an ecosystem-wide basis; and (4) continued respect for tribal sovereignty over management of natural resources on Indian lands through established tribal natural resource programs.

We believe that the current co-manager process addressing activities on an ecosystem-wide basis across three states is currently beneficial for the conservation of the salmonids. Because the co-manager process provides for coordinated ongoing focused action through a variety of forums, we find the benefits of this process to be greater than the benefits of applying ESA section 7 to Federal activities on Indian lands, which comprise less than three percent of the total area under consideration for these ESUs. Additionally, we have determined that the exclusion of tribal lands will not result in the extinction of the species concerned. We also believe that maintenance of our current co-manager relationship consistent with existing policies is an important benefit to continuance of our tribal trust responsibilities and relationship. Based upon our consultation with the Tribes, we believe that designation of Indian lands as critical habitat would adversely impact our working relationship and the benefits resulting from this relationship.

Based upon these considerations, we have determined to exercise agency discretion under ESA section 4(b)(2) and propose to exclude Indian lands from the eligible critical habitat designation for these ESUs of salmonids. The Indian lands specifically excluded from critical habitat are those defined in the Secretarial Order, including: (1) Lands held in trust by the United States for the benefit of any Indian tribe; (2) land held in trust by the United States for any Indian Tribe or individual subject to restrictions by the United States against alienation; (3) fee lands, either within or outside the reservation boundaries, owned by the tribal government; and (4) fee lands within the reservation boundaries owned by individual Indians.

#### *Impacts on National Security*

As noted previously (see Military Lands section), we evaluated 11 DOD sites with draft or final INRMPs and determined that each INRMP provides a benefit to the listed salmon or *O. mykiss* ESUs under consideration at the site. Therefore, we are proposing that those areas subject to final INRMPs are not eligible for designation pursuant to section 4(a)(3)(B)(I) of the ESA (16 U.S.C. 1533(A)(3)). At the request of the DOD (and in the case that an INRMP might not provide a benefit to the species), we also assessed the impacts on national security that may result from designating these and other DOD sites as critical habitat.

We contacted the DOD by letter and requested information about the impacts

to national security that may result from designating critical habitat at the following 24 military sites in Washington: (1) Naval Submarine Base, Bangor; (2) Naval Undersea Warfare Center, Keyport; (3) Naval Ordnance Center, Port Hadlock (Indian Island); (4) Naval Radio Station, Jim Creek; (5) Naval Fuel Depot, Manchester; (6) Naval Air Station, Whidbey Island; (7) Naval Air Station, Everett; (8) Bremerton Naval Hospital; (9) Fort Lewis (Army); (10) Pier 23 (Army); (11) Yakima Training Center (Army); (12) Puget Sound Naval Shipyard; (13) Naval Submarine Base Bangor security zone; (14) Strait of Juan de Fuca naval air-to-surface weapon range, restricted area; (15) Hood Canal and Dabob Bay naval non-explosive torpedo testing area; (16) Strait of Juan de Fuca and Whidbey Island naval restricted areas; (17) Admiralty Inlet naval restricted area; (18) Port Gardner Naval Base restricted area; (19) Hood Canal naval restricted areas; (20) Port Orchard Passage naval restricted area; (21) Sinclair Inlet naval restricted areas; (22) Carr Inlet naval restricted areas; (23) Dabob Bay/Whitney Point naval restricted area; and (24) Port Townsend/Indian Island/Walan Point naval restricted area. All of these sites overlap with habitat areas occupied by one or more of the 13 ESUs and under consideration for critical habitat. A number of other sites (primarily armories and small Army facilities) were also assessed and were determined to be outside the areas under consideration. In response to our letter, both the Army and Navy provided information clarifying site locations and describing the types of military activities that occur at these sites. They also listed the potential changes in these activities and consequent national security impacts that critical habitat designation would cause in these areas. Both military agencies concluded that critical habitat designation at any of these sites would likely impact national security by diminishing military readiness. The possible impacts include: Preventing, restricting, or delaying training or testing exercises or access to such sites; restricting or delaying activities associated with vehicle/vessel/facility maintenance and ordinance loading; delaying response times for ship deployments and overall operations; and creating uncertainties regarding ESA consultation (e.g., reinitiation requirements) or imposing compliance conditions that would divert military resources. Also, both military agencies cited their ongoing and positive consultation history with NMFS and underscored cases where

they are implementing best management practices to reduce impacts on listed salmonids.

Most of the affected DOD sites overlap habitat areas in nearshore zones occupied by Puget Sound chinook or Hood Canal summer-run chum salmon. The overlap consists of approximately 109 miles (175 km) of shoreline out of the 2,376 miles (3,824 km) of total occupied shoreline for these two ESUs. Freshwater and estuarine overlap areas include approximately 20 miles (32 km) of stream used by Puget Sound chinook salmon and 10 miles (16 km) used by Upper Columbia River *O. mykiss*, representing less than one percent of the total freshwater and estuarine habitat area for these two ESUs. The Teams assessing conservation values for these overlap areas concluded that all of them were of high conservation value to the respective ESUs. However, the overlap areas are a small percentage of the total area for the affected ESUs. Designating these DOD sites will likely reduce the readiness capability of the Army and Navy, both of which are actively engaged in training, maintaining, and deploying forces in the current war on terrorism. Therefore we conclude that the benefits of exclusion outweigh the benefits of designation and are not proposing to designate these DOD sites as critical habitats.

#### *Other Potential Exclusions*

As discussed above, in 2001, the Tenth Circuit issued a ruling in *NMCA*, which criticized the historic approach that FWS and NMFS had taken towards the economic analysis required in the critical habitat designation process. As a result of this ruling, both agencies engaged in a long-term process of reevaluating existing critical habitat designations consistent with the Tenth Circuit's ruling. NMFS's critical habitat designations for steelhead and salmon ESUs and FWS's designations for bull trout are the first to fully evaluate the economic impacts of the designations for aquatic species on a broad landscape scale. As a result, many of the critical issues faced by the two agencies are issues of first impression.

On October 6, 2004, the FWS issued a final rule designating critical habitat for the bull trout, a species in many respects coextensive with listed salmon and steelhead ESUs. Necessarily, the FWS had to make determinations on many of these novel issues. The Secretary of the Interior found that a number of conservation measures designed to protect salmon and steelhead on federal, state, tribal and private lands would also have significant beneficial impacts to

bulltrout. Therefore, the Secretary of the Interior determined that the benefits of excluding those areas exceeded the benefits of including those areas as critical habitat.

The Secretary of Commerce has reviewed the bull trout rule and has recognized the merits of the approach taken by the Secretary of the Interior to these emerging issues. As a result, the Secretary of Commerce is considering the following exclusions because the benefits of exclusion may outweigh the benefits of inclusion and expects the final rule will include some or all of these exclusions. However, given the time constraints associated with this rulemaking and the broader geographic range of the potential salmon and steelhead designations, the Secretary of Commerce has not had an opportunity to fully evaluate all of the potential exclusions, the geographical extent of such exclusions, or compare the benefits of these exclusions to the benefits of inclusion. As a result, the proposed designations included in this rule generally represent an upper bound to the area that the Secretary is considering designating as critical habitat and do not include the following additional exclusions that the Secretary is considering:

*A set of exclusions based on existing land management plans adopted and currently implemented by Federal agencies within the relevant geographic area:* These plans are the Northwest Forest Plan, PACFISH and INFISH, which are implemented by the USDA Forest Service and the BLM in parts of Washington, Oregon and Idaho. The Secretary is considering excluding from critical habitat all federal lands subject to these plans. We may make these exclusions on a fifth field watershed basis or a stream-by-stream basis and we invite comment on the appropriate method. Each of these plans is designed to provide very substantial conservation benefits to salmonid species including the listed species, while permitting provision of other multiple uses on those federal lands to the extent compatible with the provisions of the plan. Imposing an overlay of critical habitat in these areas could threaten the provision of the other multiple uses contemplated by these plans and potentially impede vital land restoration activities, while potentially offering a negligible conservation benefit in light of the other existing conservation measures provided by the plans. The threat to forest restoration activities (forest thinning and brush clearing to reduce catastrophic fire risks), economic activities (e.g. grazing and timber production) and recreational uses on

public lands may outweigh the benefit of a critical habitat designation in these areas.

*An exclusion of areas in the mainstem Columbia River that contain or are directly affected by the operation of the federal dams on the river, including reservoir pools above dams, tail race areas below dams, and the navigation locks:* The intent of this potential exclusion is that the operation of the Federal Columbia River Power System (FCRPS) would have no effect on designated critical habitat. The FCRPS is already managed through an unprecedented cooperative effort among three Federal action agencies (Bonneville Power Administration, Corps, Bureau of Reclamation (BOR)), three Federal land management agencies (Forest Service, BLM, Natural Resource Conservation Service (NRCS)) and three Federal regulatory agencies (NMFS, FWS and Environmental Protection Agency (EPA)). These agencies, operating through a Federal Caucus, closely and effectively coordinate their activities to minimize any adverse effects of operating the hydroelectric dams on the Columbia and Snake Rivers. There may be no benefit to placing a critical habitat designation as an additional layer of Federal regulation over and above the existing cooperative efforts. Conversely, if a critical habitat designation reduces hydro electric power generation from the dams, there may be great economic harm to the three-state region.

*An exclusion of areas covered by conservation commitments by state and private landowners:* Another set of exclusions is based on conservation commitments by state and private landowners reflected in habitat conservation plans and cooperative agreements approved by NMFS. These commitments are: (1) Land subject to Washington state forest practice rules referred to as the Forests and Fish Agreement; (2) lands covered by a Habitat Conservation Plan (HCP) approved under section 10 of the ESA (NMFS, 2004f); and (3) non-Federal timber lands covered by the Term Sheet in the Snake River Basin Adjudication (SRBA).

*An exclusion for intermingled lands:* If a large part of a watershed is determined to warrant exclusion for any of the reasons stated below, the Secretary is considering excluding the entire watershed. For example, if a large proportion of a watershed consists of Federal land to be excluded based on an existing management plan, the entire watershed could be excluded. There may be little policy justification for designating non-Federal lands as critical

habitat in a watershed dominated by excluded Federal lands.

*Snake River O. Mykiss ESU:* The Secretary is considering excluding all eligible habitat in this ESU from the critical habitat designation. More than 225 of the HUC5 watersheds contain 40 percent or more Federal land subject to protection under the PACFISH management standards; almost 200 of these watersheds are 80 percent or more of such Federal land. Another seven HUC5 watersheds are more than 98 percent tribal lands. Some of the eligible habitat is found within the mainstem of the Columbia River, which is already subject to the most comprehensive Federal salmonid management strategy of any area of salmonid habitat, with participation by at least eight Federal agencies. Most of the geographic area of the ESU lies in Idaho, where the State of Idaho has reached agreement in principle with the Federal government as part of a tribal water rights adjudication for the Snake River Basin to adopt new land management standards for state lands and for private landowners who choose to enroll in the program, potentially offering a higher level of conservation efforts on these lands in the future than may have been provided in the past. Many residents of the affected area are voluntarily undertaking other substantial actions to help improve and increase available habitat for this species. The economy in the affected region of all three states is primarily rural in nature, and is especially sensitive to additional land management burdens. For these reasons, the benefits of excluding the eligible habitat in this ESU may outweigh the benefits of designation as critical habitat.

*Upper Columbia River spring-run ESU:* The Secretary is considering an exclusion of all eligible habitat within the range of this ESU from the critical habitat designation. Seventeen of the 30 HUC5 watersheds contain 48 percent or more Federal land subject to protection under the PACFISH management standards. Much of the eligible habitat is found within the mainstem of the Columbia River which is already subject to the most comprehensive Federal salmonid management strategy of any area of salmonid habitat, with participation by at least eight Federal agencies. The affected economy is primarily rural in nature, and is especially sensitive to additional land management burdens. At the same time, many residents of the affected area are voluntarily undertaking substantial actions to help improve and increase available salmon habitat. For these reasons, the benefits of excluding the

eligible habitat in this ESU may outweigh the benefits of designation as critical habitat.

*Middle Columbia River O. mykiss* ESU: The Secretary is considering an exclusion of all eligible habitat within the range of this ESU from the critical habitat designation. Twenty-seven of the HUC5 watersheds contain 48 percent or more Federal land subject to protection under the PACFISH management standards; another 16 of these watersheds are 25 to 48 percent of such Federal land. Another 10 HUC5 watersheds are 70 to 100 percent tribal lands. Some of the eligible habitat is found within the mainstem of the Columbia River, which is already subject to the most comprehensive federal salmonid management strategy of any area of salmonid habitat, with participation by at least eight Federal agencies.

In both Washington and Oregon, there are many voluntary conservation activities underway by Federal agencies (BOR in particular), state agencies and private citizens throughout the range of the ESU. We have noted recently that the ESU may be close to meeting recovery standards, and NOAA's scientists have consistently rated the degree of risk for this ESU the lowest among the listed salmonid species. The economy in the affected region of both states is primarily rural in nature and is especially sensitive to additional land management burdens. For these reasons, the benefits of excluding the eligible habitat in this ESU may outweigh the benefits of designation as critical habitat.

*Oregon Coast coho ESU*: The Secretary is considering an exclusion of all eligible habitat within the range of this ESU from the critical habitat designation. One primary reason for this exclusion may lie in the voluntary conservation efforts undertaken by the State of Oregon and its citizens in this area since 1996, collectively referred to as the Oregon Plan for Salmon and Watersheds. Under the Oregon Plan, very substantial improvements have occurred, and are expected to continue to occur, to improve and increase habitat, to reduce harvest and to reform hatchery practices to aid in the conservation of this species. These efforts by the State and its citizens are a national model for cooperative conservation. Designating critical habitat in this ESU could discourage and even undercut these voluntary conservation efforts, possibly resulting in a decrease rather than an increase in conservation of the species.

In addition, 36 of the 80 watersheds contain 40 percent or more Federal land

managed under the protective provisions of the Northwest Forest Plan's Aquatic Conservation Strategy, and an additional 16 watersheds contain 25 to 40 percent of such Federal land. With these protective measures in place on Federal land to complement the non-Federal conservation efforts embodied in the Oregon Plan, there may be little biological justification to designate critical habitat within the range of this ESU. Further, the coastal economy is and has been weak for some time, with the manufacturing sector declining and tourism emerging slowly as the leading industry, and additional economic burdens may not be justified in light of the potentially limited conservation benefit of a critical habitat designation. For these reasons, the benefits of excluding the eligible habitat in this ESU may outweigh the benefits of designation as critical habitat.

Accordingly, NMFS specifically asks for public comment on the other potential exclusions discussed above. Specifically, NMFS requests comment on the benefits of excluding and including: (1) Other Federal lands subject to protective management provisions for salmonids (e.g., the Aquatic Conservation Strategy of the Northwest Forest Plan, PACFISH, or INFISH); (2) other state, tribal, or private lands subject to (or planned to receive) other forms of protective management for salmonids (e.g., private land HCPs, State of Washington Forests Practices Act lands, Idaho SRBA lands, State of California Forest Practices Act lands); and (3) other state, tribal, or private lands within watersheds containing a large proportion of Federal, state, tribal or private lands already subject to protective management measures.

#### *Exclusions Primarily Based on Economic Impacts*

In this exercise of discretion, the first issue we must address is the scope of impacts relevant to the 4(b)(2) evaluation. As discussed in the Previous Federal Action and Related Litigation section, we are re-designating critical habitat for these 13 ESUs because the previous designations were vacated. (*National Association of Homebuilders v. Evans*, 2002 WL 1205743 No. 00-CV-2799 (D.D.C.) (NAHB)). The NAHB Court had agreed with the reasoning of the Court of Appeals for the Tenth Circuit in *New Mexico Cattle Growers Association v. U.S. Fish and Wildlife Service*, 248 F.3d 1277 (10th Cir. 2001). In that decision, the Tenth Circuit stated "[t]he statutory language is plain in requiring some kind of consideration of economic impact in the critical habitat designation phase." The Tenth Circuit

concluded that, given the FWS' failure to distinguish between "adverse modification" and "jeopardy" in its 4(b)(2) analysis, the FWS must analyze the full impacts of critical habitat designation, regardless of whether those impacts are co-extensive with other impacts (such as the impact of the jeopardy requirement).

In re-designating critical habitat for these salmon ESUs, we have followed the Tenth Circuit Court's directive regarding the statutory requirement to consider the economic impact of designation. Areas designated as critical habitat are subject to ESA section 7 requirements, which provide that Federal agencies ensure that their actions are not likely to destroy or adversely modify critical habitat. To evaluate the economic impact of critical habitat we first examined our voluminous section 7 consultation record for these as well as other ESUs of salmon. (For thoroughness, we examined the consultation record for other ESUs to see if it shed light on the issues.) That record includes consultations on habitat-modifying Federal actions both where critical habitat has been designated and where it has not. We could not discern a distinction between the impacts of applying the jeopardy provision versus the adverse modification provision in occupied critical habitat. Given our inability to detect a measurable difference between the impacts of applying these two provisions, the only reasonable alternative seemed to be to follow the recommendation of the Tenth Circuit, approved by the NAHB court—to measure the co-extensive impacts; that is, measure the entire impact of applying the adverse modification provision of section 7, regardless of whether the jeopardy provision alone would result in the identical impact.

The Tenth Circuit's opinion only addressed ESA section 4(b)(2)'s requirement that economic impacts be considered. The Court did not address how "other relevant impacts" were to be considered, nor did it address the benefits of designation. Because section 4(b)(2) requires a consideration of other relevant impacts of designation, and the benefits of designation, and because our record did not support a distinction between impacts resulting from application of the adverse modification provision versus the jeopardy provision, we are uniformly considering coextensive impacts and coextensive benefits, without attempting to distinguish the benefit of a critical habitat consultation from the benefit that would otherwise result from a jeopardy consultation that would occur

even if critical habitat were not designated. To do otherwise would distort the balancing test contemplated by section 4(b)(2).

The principal benefit of designating critical habitat is that Federal activities that may affect such habitat are subject to consultation pursuant to section 7 of the ESA. Such consultation requires every Federal agency to ensure that any action it authorizes, funds or carries out is not likely to result in the destruction or adverse modification of critical habitat. This complements the section 7 provision that Federal agencies ensure that their actions are not likely to jeopardize the continued existence of a listed species. Another benefit is that the designation of critical habitat can serve to educate the public regarding the potential conservation value of an area and thereby focus and contribute to conservation efforts by clearly delineating areas of high conservation value for certain species. It is unknown to what extent this process actually occurs, and what the actual benefit is, as there are also concerns, noted above, that a critical habitat designation may discourage such conservation efforts.

The balancing test in section 4(b)(2) contemplates weighing benefits that are not directly comparable—the benefit to species conservation balanced against the economic benefit, benefit to national security, or other relevant benefit that results if an area is excluded from designation. Section 4(b)(2) does not specify a method for the weighing process. Agencies are frequently required to balance benefits of regulations against impacts; Executive Order 12866 established this requirement for Federal agency regulation. Ideally such a balancing would involve first translating the benefits and impacts into a common metric. Executive branch guidance from the Office of Management and Budget (OMB) suggests that benefits should first be monetized (*i.e.*, converted into dollars). Benefits that cannot be monetized should be quantified (for example, numbers of fish saved). Where benefits can neither be monetized nor quantified, agencies are to describe the expected benefits (OMB, Circular A–4, September 17, 2003 (OMB, 2003)).

It may be possible to monetize benefits of critical habitat designation for a threatened or endangered species in terms of willingness-to-pay (U.S. Office of Management and Budget, 2003). However, we are not aware of any available data that would support such an analysis for salmon. The short statutory time-frames, geographic scale of the designations under consideration, and the statute's requirement to use best

“available” information suggests such a costly and time-consuming approach is not currently available. In addition, ESA section 4(b)(2) requires analysis of impacts other than economic impacts that are equally difficult to monetize, such as benefits to national security of excluding areas from critical habitat. In the case of salmon designations, impacts to Northwest tribes are an “other relevant impact” that also may be difficult to monetize.

An alternative approach, approved by OMB, is to conduct a cost-effectiveness analysis. A cost-effectiveness analysis ideally first involves quantifying benefits, for example, percent reduction in extinction risk, percent increase in productivity, or increase in numbers of fish. Given the state of the science, it would be difficult to quantify reliably the benefits of including particular areas in the critical habitat designation. Although it is difficult to monetize or quantify benefits of critical habitat designation, it is possible to differentiate among habitat areas based on their relative contribution to conservation. For example, habitat areas can be rated as having a high, medium or low conservation value. The qualitative ordinal evaluations can then be combined with estimates of the economic costs of critical habitat designation in a framework that essentially adopts that of cost-effectiveness. Individual habitat areas can then be assessed using both their biological evaluation and economic cost, so that areas with high conservation value and lower economic cost might be considered to have a higher priority for designation, while areas with a low conservation value and higher economic cost might have a higher priority for exclusion. While this approach can provide useful information to the decision-maker, there is no rigid formula through which this information translates into exclusion decisions. Every geographical area containing habitat eligible for designation is different, with a unique set of “relevant impacts” that may be considered in the exclusion process. Regardless of the analytical approach, section 4(b)(2) makes clear that what weight the agency gives various impacts and benefits, and whether the agency excludes areas from the designation, is discretionary.

#### Assessment of Economic Impacts

Assessment of economic impact generated considerable interest from commenters on the ANPR (68 FR 55926; September 29, 2003). A number of commenters requested that we make the economic analysis available as part of

the proposed rulemaking, and some identified key considerations (*e.g.*, sector-specific impacts, direct and indirect costs, ecological services/benefits) that they believed must be taken into account. In a draft 2004 report, we have documented our conclusions regarding the economic impacts of designating each of the particular areas found to meet the definition of critical habitat (NMFS, 2004c). This report is available from NMFS (*see ADDRESSES*).

The first step was to identify existing legal and regulatory constraints on economic activity that are independent of critical habitat designation, such as Clean Water Act (CWA) requirements. Coextensive impacts of the ESA section 7 requirement to avoid jeopardy were not considered part of the baseline. Also, we have stated our intention to revisit the existing critical habitat designations for Snake River chinook and sockeye salmon ESUs (58 FR 68543; December 28, 1993), if appropriate, following completion of related rulemaking (67 FR 6215; February 11, 2002). Given the uncertainty that these designations will remain in place in their current configuration, we decided not to consider them.

Next, from the consultation record, we identified Federal activities that might affect habitat and that might result in a section 7 consultation. (We did not consider federal actions, such as the approval of a fishery, that might affect the species directly but not affect its habitat.) We identified nine types of activities including: hydropower dams; non-hydropower dams and other water supply structures; federal lands management, including grazing (considered separately); transportation projects; utility line projects; instream activities, including dredging (considered separately); activities permitted under EPA's National Pollution Discharge Elimination System; sand & gravel mining; and residential and commercial development. Based on our consultation record and other available information, we determined the modifications each type of activity was likely to undergo as a result of section 7 consultation (regardless of whether the modification might be required by the jeopardy or the adverse modification provision).

We developed an expected direct cost for each type of action and projected the likely occurrence of each type of project in each watershed, using existing spatial databases (*e.g.*, the Corps 404(d) permit database). Finally, we aggregated the costs from the various types of actions and estimated an annual impact, taking into account the probability of

consultation occurring and the likely rate of occurrence of that project type.

This analysis allowed us to estimate the coextensive economic impact of designating each "particular area" (that is, each habitat area, or aggregated occupied stream reaches in a watershed). Expected economic impacts ranged from zero to \$15 million per habitat area. Where a watershed included both tributaries and a migration corridor that served other watersheds, we estimated the separate impacts of designating the tributaries and the migration corridor. We did this by identifying those categories of activities most likely to affect tributaries and those most likely to affect larger migration corridors.

Because of the methods we selected and the data limitations, portions of our analysis both under- and over-estimate the co-extensive economic impact of section 7 requirements. For example, we lacked data on the likely impact on flows at non-Federal hydropower projects, which would increase economic impacts. We also did not have information currently available allowing us to estimate the likely economic impact of a judicially-imposed ban on pesticide use near salmon-bearing streams. The EPA was recently enjoined from authorizing the application of a set of pesticides within a certain distance of "salmon supporting waters." We have completed a preliminary analysis of these impacts at the ESU level (NMFS, 2004c). Because of the existing data limitations and the preliminary nature of the analysis, we determined not to use these estimates in the proposed designations. However, we believe the information presented in this preliminary consideration will aid public comment and assist in the development of a more complete examination of these impacts for the final rule. In addition, operation and maintenance of the FCRPS has changed in response to section 7 requirements. Federal agencies estimate direct costs of the FCRPS fish and wildlife program to be approximately \$283 million annually, while the power costs in 2003 were estimated to be approximately \$250 million. Many of these costs would occur without the requirements of section 7, but there is currently no estimate available of what portion of these costs are attributable to section 7. Finally, we did not have information about potential changes in irrigation flows associated with section 7 consultation. These impacts would increase the estimate of co-extensive costs. On the other hand, we estimated an impact on all activities occurring within the geographic boundaries of a

watershed, even though in some cases activities would be far removed from occupied stream reaches and so might not require modification (or even consultation). We intend to pursue information prior to issuing a final rule that will allow us to refine our estimates of economic impacts and better inform our analysis under section 4(b)(2) (NMFS, 2004d).

In addition, we had no information on the costs of critical habitat designation that occur outside the section 7 consultation process, including costs resulting from state or local regulatory burdens imposed on developers and landowners as a result of a Federal critical habitat designation. We solicit information on these subjects during the public comment period.

#### Exclusion Process

In determining whether the economic benefit of excluding a habitat area might outweigh the benefit of designation to the species, we took into consideration a cost-effectiveness approach giving priority to excluding habitat areas with a relatively lower benefit of designation and a relatively higher economic impact. We believe it is reasonable at this stage of the analysis to assume that all areas containing physical or biological features essential to the conservation of the species are essential to the conservation of the species.

The circumstances of most of the listed ESUs can make a cost-effectiveness approach useful. Pacific salmon are wide-ranging species and occupy numerous habitat areas with thousands of stream miles. Not all occupied areas, however, are of equal importance to conserving an ESU. Within the currently occupied range there are areas that support highly productive populations, areas that support less productive populations, and areas that support production in only some years. Some populations within an ESU may be more important to long-term conservation of the ESU than other populations. Therefore, in many cases it may be possible to construct different scenarios for achieving conservation. Scenarios might have more or less certainty of achieving conservation, and more or less economic impact. Future applications of this methodology will strive to better distinguish the relative conservation value of areas eligible for designation, which should improve the utility of this approach.

We attempted to consider the effect of excluding areas, either alone or in combination with other areas, on the opportunities for conservation of the ESU. We preferred exclusions in areas

with a lower conservation value to those with a high conservation value. We also recognize that in practice a large proportion of all watersheds received a "high" conservation rating, making it difficult to establish priorities within that subgroup. In the second step of the process, we asked the biological teams whether excluding any of the habitat areas identified in the first step would significantly impede conservation, recognizing that the breadth of available conservation measures makes such judgments necessarily subjective. The teams considered this question in the context of all of the areas eligible for exclusion as well as the information they had developed in providing the initial conservation ratings. The following section describes the results of applying this process to each ESU. The results are discussed in greater detail in a separate report that is available for public review and comment (NMFS, 2004d). While the possible effect on conservation was useful information, it was not determinative in deciding whether to propose the exclusion of an area. The only determinative limitation is the statutory bar on excluding any area that "will result in the extinction of the species concerned."

#### Critical Habitat Designation

Not including any of the eight other potential exclusions identified under Other Potential Exclusions, we are proposing to designate approximately 27,553 mi (44,342 km) of lake, riverine, and estuarine habitat in Washington, Oregon, and Idaho, and 2,121 mi (3,413 km) of nearshore marine habitat in Puget Sound within the geographical areas presently occupied by the 13 ESUs. Some of these proposed areas overlap with two or more ESUs (Table 2), and approximately 1,327 mi (2,136 km) overlap with Indian reservations (a portion of which are Indian lands not proposed for designation). Some of these areas also overlap with military lands (described in the *Military Lands* section), which are not proposed for designation either because they are subject to INRMPs that benefit listed species (NMFS, 2004b) or were determined to have national security impacts that outweigh the benefit of designation. The net economic impacts (coextensive with ESA section 7) associated with the areas proposed for designation for all ESUs are estimated to be approximately \$223,950,127. This estimate does not account for reductions that occur as a result of excluding Indian lands or military lands. Moreover, as discussed previously, we are soliciting comment on additional



exclusions which, if adopted, would further reduce the estimate of coextensive costs.

These proposed designated habitat areas, summarized below by ESU,

contain physical and biological features essential to the conservation of the species and that may require special management considerations or protection. Some of the areas proposed

for designation are likely to be excluded in the final rule after consideration of the additional eight potential exclusions identified above.

TABLE 2.—APPROXIMATE QUANTITY OF PROPOSED CRITICAL HABITAT\* AND OWNERSHIP WITHIN WATERSHEDS CONTAINING HABITAT AREAS PROPOSED FOR DESIGNATION

ESU	Streams (mi) (km)	Lakes (sq mi) (sq km)	Near- shore Marine (mi) (km)	Ownership (percent)			
				Federal	Tribal	State	Private
Puget Sound Chinook Salmon .....	1,694	41	2,185	46.4	1.0	10.0	42.6
	2,726	106	3,516				
Lower Columbia River Chinook Salmon .....	1,250	33		37.0	0.0	7.6	55.4
	2,012	85.5					
Upper Willamette River Chinook Salmon .....	1,571	18		39.9	0.4	0.7	59.0
	2,528	46.6					
Upper Columbia River Spring-run Chinook Salmon .....	926	4		71.4	0.0	4.6	23.9
	1,490	10.4					
Oregon Coast Coho Salmon .....	6,527	15		31.3	0.2	9.4	59.2
	10,504	38.8					
Hood Canal Summer-run Chum Salmon .....	75		377	45.8	0.4	13.9	39.9
	121		607				
Columbia River Chum Salmon .....	656			16.6	0.0	13.6	69.8
	1,056						
Ozette Lake Sockeye Salmon .....	40	12		19.3	1.2	7.1	72.4
	64	31					
Upper Columbia River <i>O. mykiss</i> .....	1,247	7		53.7	5.5	9.1	31.7
	2,007	18.1					
SNAKE River Basin <i>O. mykiss</i> .....	7,622	4		70.0	3.8	2.1	24.1
	12,266	10					
Middle Columbia River <i>O. mykiss</i> .....	5,376			25.5	13.2	3.5	57.8
	8,652						
Lower Columbia River <i>O. mykiss</i> .....	2,428	27		43.9	0.4	5.9	49.7
	3,908	70					
Upper Willamette River <i>O. mykiss</i> .....	1,312	2		11.4	0.4	1.4	86.9
	2,108	5.2					

\* These estimates are the total amount proposed for each ESU. They do not account for overlapping areas (e.g., the Columbia River corridor) proposed for multiple ESUs.

#### Puget Sound Chinook Salmon ESU

There are 61 watersheds within the spawning range of this ESU (for ease of reference these watersheds have been organized into 18 units based on their associated subbasin). Twelve watersheds received a low rating, 9 received a medium rating, and 40 received a high rating of conservation value to the ESU (NMFS, 2004a). Nineteen nearshore marine areas also received a rating of high conservation value.

Habitat areas for this ESU include 2,148 mi (3,457 km) of stream and 2,376 mi (3,824 km) of nearshore marine areas. Of these, 12 stream miles (19 km) and 109 nearshore miles (175 km) are not proposed for designation because they are within lands controlled by the military that contain qualifying INRMPs

or they would result in national security impacts that outweigh the benefits of designation. Fifty-three miles (85 km) of stream and 147 mi (237 km) of nearshore marine areas are within the boundaries of Indian reservations, but only those reaches defined as Indian lands (see *Government-to-Government Relationship With Tribes*) are proposed for exclusion. We have not calculated the potential reduction in estimated economic impact as a result of these Indian land exclusions, but expect it would be small given the small percentage of stream miles these exclusions represent.

As a result of the balancing process for economic impacts described above, the Secretary is currently proposing to exclude from the designation, at a minimum, the habitat areas shown in

Table 3. Of the areas eligible for designation, no fewer than 389 stream miles (624 km) are proposed for exclusion because the economic benefits of exclusion outweigh the benefits of designation. Total potential estimated economic impact, with no exclusions, would be \$95,374,362. The exclusions set forth in Table 3 would reduce the total estimated economic impact is \$77,355,898. However, as indicated above, the Secretary is considering a number of additional exclusions which may further reduce this economic impact by a substantial amount. For Puget Sound chinook, a preliminary analysis of the economic impact of designating critical habitat after considering some of these additional exclusions indicates that it could be reduced to about \$4,200,000.



TABLE 3.—FIFTH-FIELD WATERSHEDS OCCUPIED BY THE PUGET SOUND CHINOOK SALMON ESU AND PROPOSED FOR EXCLUSION FROM CRITICAL HABITAT

Subbasin/Unit	Watershed code	Watershed name	Area proposed for exclusion
Unit 1. Strait of Georgia subbasin .....	1711000201	Bellingham Bay .....	Entire watershed
	1711000202	Samish River .....	Entire watershed
	1711000204	Birch Bay .....	Entire watershed
Unit 3. Upper Skagit River subbasin .....	1711000508	Baker River .....	Entire watershed
Unit 10. Lake Washington subbasin .....	1711001202	Lake Sammamish .....	Entire watershed
	1711001204	Sammamish River .....	Entire watershed
Unit 14. Deschutes River subbasin .....	1711001601	Prairie .....	Entire watershed
	1711001602	Prairie .....	Entire watershed
Unit 16. Hood Canal subbasin .....	1711001802	Lower West Hood Canal Frontal .....	Entire watershed
	1711001806	Big Quilcene River .....	Entire watershed
	1711001808	West Kitsap .....	Entire watershed
Unit 17. Kitsap subbasin .....	1711001900	Kennedy/Goldsborough .....	Entire watershed
	1711001901	Puget .....	Entire watershed
	1711001902	Prairie .....	Entire watershed
	1711001904	Puget Sound/East Passage .....	Entire watershed
Unit 18. Dungeness/Elwha Rivers subbasin .....	1711002004	Port Angeles Harbor .....	Entire watershed

**Lower Columbia River Chinook Salmon ESU**

There are 47 watersheds within the spawning range of this ESU (for ease of reference these watersheds have been organized into 10 units based on their associated subbasin). Four watersheds received a low rating, 13 received a medium rating, and 30 received a high rating of conservation value to the ESU (NMFS, 2004a). The lower Columbia River corridor downstream of the

spawning range was also considered to have a high conservation value.

As a result of the balancing process for economic impacts described above, the Secretary is currently proposing to exclude from the designation, at a minimum, the habitat areas shown in Table 4. Of the 1,440 miles (2,317 km) eligible for designation, no fewer than 190 mi (306 km) are proposed for exclusion because the economic benefits of exclusion outweigh the benefits of designation. Total potential estimated

economic impact is \$35,077,449. After exclusions the total estimated economic impact is \$26,114,165. However, as indicated above, the Secretary is considering a number of additional exclusions which may further reduce this economic impact by a substantial amount. For Lower Columbia River chinook, a preliminary analysis of the economic impact of designating critical habitat after considering some of these additional exclusions indicates that it could be reduced to about \$6,300,000.

TABLE 4.—FIFTH-FIELD WATERSHEDS OCCUPIED BY THE LOWER COLUMBIA RIVER CHINOOK SALMON ESU AND PROPOSED FOR EXCLUSION FROM CRITICAL HABITAT

Subbasin/Unit	Watershed code	Watershed name	Area proposed for exclusion
Unit 1. Middle Columbia/Hood subbasin .....	1707010510	Little White Salmon River .....	Entire watershed
Unit 2. Lower Columbia/Sandy Rivers subbasin .....	1708000106	Washougal River .....	Entire watershed
Unit 4. Lower Columbia/Clatskanie Rivers subbasin .....	1708000302	Beaver Creek/Columbia River .....	Entire watershed
	1708000304	Germany/Abernathy .....	Entire watershed
Unit 6. Lower Cowlitz subbasin .....	1708000504	North Fork Toutle River .....	Entire watershed
Unit 7. Lower Columbia River subbasin .....	1708000601	Youngs River .....	Entire watershed
Unit 8. Middle Willamette River subbasin .....	1709000704	Abernathy Creek .....	Entire watershed
Unit 9. Clackamas River subbasin .....	1709001105	Eagle Creek .....	Entire watershed

**Upper Willamette River Chinook Salmon ESU**

There are 56 watersheds within the spawning range of this ESU (for ease of reference these watersheds have been organized into 10 units based on their associated subbasin). Twenty watersheds received a low rating, 17 received a medium rating, and 19 received a high rating of conservation value to the ESU (NMFS, 2004a). The lower Willamette/Columbia River corridor downstream of the spawning

range was also considered to have a high conservation value.

As a result of the balancing process for economic impacts described above, the Secretary is proposing to exclude from the designation, at a minimum, the habitat areas shown in Table 5. Of the 1,788 mi (2,878 km) eligible for designation, no fewer than 217 mi (349 km) are proposed for exclusion because the economic benefits of exclusion outweigh the benefits of designation. Total potential estimated economic

impact is \$29,798,559. After exclusions the total estimated economic impact is \$24,627,805. However, as indicated above, the Secretary is considering a number of additional exclusions which may further reduce this economic impact by a substantial amount. For Upper Willamette River chinook, a preliminary analysis of the economic impact of designating critical habitat after considering some of these additional exclusions indicates that it could be reduced to about \$4,900,000.

TABLE 5. FIFTH-FIELD WATERSHEDS OCCUPIED BY THE UPPER WILLAMETTE RIVER CHINOOK SALMON ESU AND PROPOSED FOR FULL OR PARTIAL EXCLUSION FROM CRITICAL HABITAT. WATERSHEDS FOR WHICH TRIBUTARIES ONLY ARE EXCLUDED CONTAIN REARING/MIGRATION CORRIDORS NECESSARY FOR CONSERVATION.

Subbasin/Unit	Watershed code	Watershed name	Area proposed for exclusion
Unit 1. Middle Fork Willamette River subbasin .....	1709000104	Salmon Creek .....	Entire watershed
Unit 2. Coast Fork Willamette River subbasin .....	1709000201	Row River .....	Entire watershed
	1709000202	Mosby Creek .....	Entire watershed
	1709000203	Upper Coast Fork Willamette River .....	Entire watershed
	1709000205	Lower Coast Fork Willamette River .....	Entire watershed
Unit 3. Upper Willamette River subbasin .....	1709000301	Long Tom River .....	Entire watershed
	1709000302	Muddy Creek .....	Tributaries only
Unit 4. Mckenzie River subbasin .....	1709000404	Blue River .....	Entire watershed
Unit 7. Middle Willamette River subbasin .....	1709000702	Rickreall Creek .....	Tributaries only
	1709000703	Willamette River/Chehalem Creek .....	Tributaries only
	1709000704	Abernethy Creek .....	Tributaries only
Unit 8. Yamhill River subbasin .....	1709000804	Lower South Yamhill River .....	Entire watershed
	1709000805	Salt Creek/South Yamhill River .....	Entire watershed
	1709000806	North Yamhill River .....	Entire watershed
	1709000807	Yamhill River .....	Entire watershed
Unit 9. Molalla/Pudding Rivers subbasin .....	1709000901	Abiqua Creek/Pudding River .....	Entire watershed
Unit 10. Clackamas River subbasin .....	1709001105	Eagle Creek .....	Entire watershed

#### Upper Columbia River Spring-run Chinook Salmon ESU

There are 15 watersheds within the spawning range of this ESU (for ease of reference these watersheds have been organized into four units based on their associated subbasin). Six watersheds received a medium rating and nine received a high rating of conservation value to the ESU (NMFS, 2004a). The Columbia River corridor downstream of the spawning range was also considered to have a high conservation value.

As a result of the balancing process for economic impacts described above, we are proposing to exclude from the designation, at a minimum, the habitat areas shown in Table 6. Of the 976 mi (1,571 km) eligible for designation, no

fewer than 50 mi (80.5 km) are proposed for exclusion because the economic benefits of exclusion outweigh the benefits of designation. Total potential estimated economic impact is \$16,499,567. After exclusions the total estimated economic impact is \$13,511,034. However, as indicated above, the Secretary is considering a number of additional exclusions which may further reduce this economic impact by a substantial amount. For Upper Columbia River spring-run chinook, a preliminary analysis of the economic impact of designating critical habitat after considering some of these additional exclusions indicates that it could be reduced to \$0. Seventeen of the 30 HUC5 watersheds contain a substantial amount of Federal land

subject to protection under the PACFISH management standards. Much of the eligible habitat is found within the mainstem of the Columbia River, which is already subject to a comprehensive Federal salmonid management strategy, with participation by at least eight Federal agencies. The affected economy is primarily rural in nature, and is especially sensitive to additional land management burdens. At the same time, many residents of the affected area are voluntarily undertaking substantial actions to help improve and increase available salmon habitat. For these reasons, the benefits of excluding the eligible habitat in this ESU may outweigh the benefits of designation as critical habitat.

TABLE 6.—FIFTH-FIELD WATERSHEDS OCCUPIED BY THE UPPER COLUMBIA RIVER SPRING-RUN CHINOOK SALMON ESU AND PROPOSED FOR FULL OR PARTIAL EXCLUSION FROM CRITICAL HABITAT. WATERSHEDS FOR WHICH TRIBUTARIES ONLY ARE EXCLUDED CONTAIN REARING/MIGRATION CORRIDORS NECESSARY FOR CONSERVATION

Subbasin/Unit	Watershed code	Watershed name	Area proposed for exclusion
Unit 2. Methow River subbasin .....	1702000807	Lower Methow River .....	Tributaries only
Unit 3. Upper Columbia/Entiat Rivers subbasin .....	1702001002	Lake Entiat .....	Tributaries only
Unit 4. Wenatchee River subbasin .....	1702001104	Icicle/Chumstick .....	Tributaries only
	1702001105	Lower Wenatchee River .....	Tributaries only

#### Oregon Coast Coho Salmon ESU

There are 80 watersheds within the spawning range of this ESU (for ease of reference these watersheds have been organized into 13 units based on their associated subbasin). Ten watersheds received a low rating, 28 received a medium rating, and 42 received a high rating of conservation value to the ESU (NMFS, 2004a).

There are 6,665 mi (10,726 km) of stream in the 80 habitat areas for Oregon Coast coho. Three miles (4.8 km) of stream are within the boundaries of Indian reservations, but only those reaches defined as Indian lands (see *Government-to-Government Relationship With Tribes*) are proposed for exclusion. We have not calculated the potential reduction in estimated

economic impact as a result of these Indian land exclusions, but expect it would be small given the small percentage of stream miles these exclusions represent.

As a result of the balancing process for economic impacts described above, we are proposing to exclude, at a minimum, from the designation the habitat areas shown in Table 7. Of the

6,665 mi (10,726 km) eligible for designation, no fewer than 135 mi (217 km) are proposed for exclusion because the economic benefits of exclusion outweigh the benefits of designation. Total potential estimated economic impact is \$18,446,139. After exclusions the total estimated economic impact is \$15,696,696. However, as indicated above, the Secretary is considering a number of additional exclusions which may further reduce this economic impact by a substantial amount. The Secretary could exclude all eligible habitat in this ESU from the critical habitat designation. One primary reason for such an exclusion lies in the voluntary conservation efforts undertaken by the State of Oregon and its citizens in this area since 1996,

collectively referred to as the Oregon Plan for Salmon and Watersheds. Under the Oregon Plan, substantial improvements have occurred, and are expected to continue to occur, to improve and increase habitat, to reduce harvest and to reform hatchery practices to aid in the conservation of this species. These efforts by the State and its citizens are a national model for cooperative conservation. Designating critical habitat in this ESU could discourage and even undercut these voluntary conservation efforts, possibly resulting in a decrease rather than an increase in conservation of the species.

In addition, 36 of the 80 watersheds contain a substantial amount of Federal land managed under the protective provisions of the Northwest Forest

Plan's Aquatic Conservation Strategy, and an additional 16 watersheds contain moderate amounts of such Federal land. With these protective measures in place on Federal land to complement the non-Federal conservation efforts embodied in the Oregon Plan, there is little biological justification to designate critical habitat in this ESU. Further, the coastal economy is and has been weak for some time, with the manufacturing sector declining and tourism emerging slowly as the leading industry. Any additional economic burdens are difficult to justify in light of the limited conservation value of a critical habitat designation. For these reasons, the benefits of excluding the eligible habitat in this ESU may outweigh the benefits of designation as critical habitat.

TABLE 7. FIFTH-FIELD WATERSHEDS OCCUPIED BY THE OREGON COAST COHO SALMON ESU AND PROPOSED FOR EXCLUSION FROM CRITICAL HABITAT

Subbasin/Unit	Watershed code	Watershed name	Area proposed for exclusion
Unit 8. North Fork Umpqua River subbasin .....	1710030106	Boulder Creek .....	Entire watershed
	1710030108	Steamboat Creek .....	Entire watershed
	1710030109	Canton Creek .....	Entire watershed
Unit 9. South Fork Umpqua River subbasin .....	1710030201	Upper South Umpqua River .....	Entire watershed
	1710030202	Jackson Creek .....	Entire watershed
	1710030204	Elk Creek/South Umpqua .....	Entire watershed
Unit 10. Umpqua River subbasin .....	1710030305	Lake Creek .....	Entire watershed
Unit 12. Coquille River subbasin .....	1710030501	Coquille S Fk, Lwr .....	Entire watershed

#### *Hood Canal Summer-run Chum Salmon ESU*

There are 12 watersheds within the spawning range of this ESU (for ease of reference these watersheds have been organized into four units based on their associated subbasin). Three watersheds received a medium rating, and nine received a high rating of conservation value to the ESU (NMFS, 2004a). Five nearshore marine areas also received a rating of high conservation value.

Habitat areas for this ESU include 88 mi (142 km) of stream and 402 mi (647 km) of nearshore marine areas. Of these, 41 nearshore miles (66 km) are not proposed for designation because they are within lands controlled by the military that contain qualifying INRMPs

or they would result in national security impacts that outweigh the benefits of designation. Six miles (10 km) of stream and 9 mi (15 km) of nearshore marine areas are within the boundaries of Indian reservations, but only those reaches defined as Indian lands (see *Government-to-Government Relationship With Tribes*) are proposed for exclusion. We have not calculated the potential reduction in estimated economic impact as a result of these Indian land exclusions, but expect it would be small given the small percentage of stream miles these exclusions represent.

As a result of the balancing process for economic impacts described above, we are proposing to exclude from the designation, at a minimum, the habitat

areas shown in Table 8. Of the areas eligible for designation 13 stream miles (20.9 km) are proposed for exclusion because the economic benefits of exclusion outweigh the benefits of designation. Total potential estimated economic impact is \$7,624,320. After exclusions the total estimated economic impact is \$6,630,479. However, as indicated above, the Secretary is considering a number of additional exclusions which may further reduce this economic impact by a substantial amount. For Hood Canal summer-run chum, a preliminary analysis of the economic impact of designating critical habitat after considering some of these additional exclusions indicates that it could be reduced to about \$1,800,000.

TABLE 8. FIFTH-FIELD WATERSHEDS OCCUPIED BY THE HOOD CANAL SUMMER-RUN CHUM SALMON ESU AND PROPOSED FOR EXCLUSION FROM CRITICAL HABITAT

Subbasin/Unit	Watershed code	Watershed name	Area proposed for exclusion
Unit 1. Skokomish River subbasin .....	1711001701	Skokomish River .....	Entire watershed

*Columbia River Chum Salmon ESU*

There are 19 watersheds within the spawning range of this ESU (for ease of reference these watersheds have been organized into six units based on their associated subbasin). Three watersheds received a medium rating, and 16 received a high rating of conservation value to the ESU (NMFS, 2004a). The lower Columbia River corridor downstream of the spawning range was

also considered to have a high conservation value.

As a result of the balancing process for economic impacts described above, we are proposing to exclude from the designation, at a minimum, the habitat areas shown in Table 9. Of the 657 mi (1,057 km) eligible for designation approximately 1 mi (1.6 km) is proposed for exclusion because the economic benefits of exclusion outweigh the benefits of designation. Total potential estimated economic impact is

\$14,413,049. After exclusions the total estimated economic impact is \$14,048,419. However, as indicated above, the Secretary is considering a number of additional exclusions which may further reduce this economic impact by a substantial amount. For Columbia River chum salmon, a preliminary analysis of the economic impact of designating critical habitat after considering some of these additional exclusions indicates that it could be reduced to about \$4,000,000.

TABLE 9. FIFTH-FIELD WATERSHEDS OCCUPIED BY THE COLUMBIA RIVER CHUM SALMON ESU AND PROPOSED FOR EXCLUSION FROM CRITICAL HABITAT

Subbasin/Unit	Watershed code	Watershed name	Area proposed for exclusion
Unit 5. Lower Cowlitz River subbasin .....	1708000504	North Fork Toutle River .....	Entire watershed

*Ozette Lake Sockeye Salmon ESU*

There is one subbasin within the Ozette Lake sockeye ESU, composed of a single watershed. This watershed was rated as having a high conservation value to the ESU (NMFS, 2004a). There are 40 mi (64 km) of stream in the one habitat area for Ozette Lake sockeye and 0.5 mi (0.8 km) of stream within the boundaries of Indian reservations. We have not calculated the potential reduction in estimated economic impact as a result of these Indian land exclusions, but expect it would be small given the small percentage of stream miles these exclusions represent.

As a result of the balancing process for economic impacts described above, no habitat is being proposed for exclusion. Total potential estimated economic impact is \$2,720.

*Upper Columbia River O. mykiss ESU*

There are 31 watersheds within the spawning range of this ESU (for ease of

reference these watersheds have been organized into 10 units based on their associated subbasin). Three watersheds received a low rating, 8 received a medium rating, and 20 received a high rating of conservation value to the ESU (NMFS, 2004a). The lower Columbia River corridor downstream of the spawning range was also considered to have a high conservation value.

There are 1,319 mi (2,123 km) of stream in the habitat areas for this ESU. Of these, 7 mi (11 km) are not proposed for designation because they are within lands controlled by the military that contain qualifying INRMPs. Fifty-nine mi (95 km) of stream are within the boundaries of Indian reservations, but only those reaches defined as Indian lands (see *Government-to-Government Relationship With Tribes*) are proposed for exclusion. We have not calculated the potential reduction in estimated economic impact as a result of these Indian land exclusions, but expect it would be small given the small

percentage of stream miles these exclusions represent.

As a result of the balancing process for economic impacts described above, we are proposing to exclude from the designation the habitat areas shown in Table 10. Of the 1,319 mi (2,123 km) eligible for designation 16 mi (26 km) are proposed for exclusion because the economic benefits of exclusion outweigh the benefits of designation. Total potential estimated economic impact is \$24,558,737. After exclusions the total estimated economic impact is \$18,843,714. However, as indicated above, the Secretary is considering a number of additional exclusions which may further reduce this economic impact by a substantial amount. For Upper Columbia River *O. mykiss*, a preliminary analysis of the economic impact of designating critical habitat after considering some of these additional exclusions indicates that it could be reduced to about \$3,000,000.

TABLE 10.—FIFTH-FIELD WATERSHEDS OCCUPIED BY THE UPPER COLUMBIA RIVER *O. mykiss* ESU AND PROPOSED FOR FULL OR PARTIAL EXCLUSION FROM CRITICAL HABITAT. WATERSHEDS FOR WHICH TRIBUTARIES ONLY ARE EXCLUDED CONTAIN REARING/MIGRATION CORRIDORS NECESSARY FOR CONSERVATION

Subbasin/Unit	Watershed code	Watershed name	Area proposed for exclusion
Unit 1. Chief Joseph subbasin .....	1702000503	Foster Creek .....	Entire watershed.
	1702000504	Jordan/Tumwater .....	Entire watershed.
Unit 5. Lake Chelan subbasin .....	1702000903	Lower Chelan .....	Entire watershed.
Unit 6. Upper Columbia/Entiat Rivers subbasin .....	1702001002	Lake Entiat .....	Tributaries only.
Unit 8. Moses Coulee subbasin .....	1702001204	Rattlesnake Creek .....	Entire watershed.

*Snake River Basin O. mykiss ESU*

There are 271 watersheds within the spawning range of this ESU (for ease of reference these watersheds have been organized into 25 units based on their

associated subbasin). Sixteen watersheds received a low rating, 42 received a medium rating, and 213 received a high rating of conservation value to the ESU (NMFS, 2004a). The

lower Snake/Columbia River corridor downstream of the spawning range was also considered to have a high conservation value.

There are 7,989 mi (12,857 km) of stream in the habitat areas (including the lower Snake/Columbia River rearing/migration corridor) of this ESU and 261 mi (420 km) of stream within the boundaries of Indian reservations, but only those reaches defined as Indian lands (see *Government-to-Government Relationship With Tribes*) are proposed for exclusion. We have not calculated the potential reduction in estimated economic impact as a result of these Indian land exclusions, but expect it would be small given the small percentage of stream miles these exclusions represent.

As a result of the balancing process for economic impacts described above, we are proposing to exclude from the designation, at a minimum, the habitat areas shown in Table 11. Of the 7,989 mi (12,857 km) eligible for designation, no fewer than 110 mi (177 km) are

proposed for exclusion because the economic benefits of exclusion outweigh the benefits of designation. Total potential estimated economic impact is \$35,746,361. After exclusions the total estimated economic impact is \$34,867,772. However, as indicated above, the Secretary is considering a number of additional exclusions which may further reduce this economic impact to \$0. More than 225 of the HUC5 watersheds contain a substantial amount of Federal land subject to protection under the PACFISH management standards. Some of the eligible habitat is found within the mainstem of the Columbia River which is already subject to a comprehensive Federal salmonid management strategy, with participation by at least eight Federal agencies. Most of the geographic area of the ESU lies in Idaho, where the State of Idaho has reached agreement in

principle with the Federal government as part of a tribal water rights adjudication for the Snake River Basin to adopt new land management standards for state lands and for private landowners who choose to enroll in the program, offering a higher level of conservation efforts on these lands in the future than may have been provided in the past. Many residents of the affected area are voluntarily undertaking other substantial actions to help improve and increase available habitat for this species. The economy in the affected region of all three states is primarily rural in nature, and is especially sensitive to additional land management burdens. For these reasons, the benefits of excluding the eligible habitat in this ESU may outweigh the benefits of designation as critical habitat.

TABLE 11.—FIFTH-FIELD WATERSHEDS OCCUPIED BY THE SNAKE RIVER BASIN *O. mykiss* ESU AND PROPOSED FOR FULL OR PARTIAL EXCLUSION FROM CRITICAL HABITAT. WATERSHEDS FOR WHICH TRIBUTARIES ONLY ARE EXCLUDED CONTAIN REARING/MIGRATION CORRIDORS NECESSARY FOR CONSERVATION

Subbasin/Unit	Watershed code	Watershed name	Area proposed for exclusion
Unit 7. Lower Snake/Tucannon Rivers subbasin ....	1706010705	Pataha Creek .....	Entire watershed.
Unit 9. Upper Salmon River subbasin .....	1706020107	Road Creek .....	Entire watershed.
Unit 10. Pahsimeroi River subbasin .....	1706020202	Pahsimeroi River/Falls Creek .....	Entire watershed.
Unit 11. Middle Salmon River-Panther Creek subbasin.	1706020319	Napias Creek .....	Entire watershed.
	1706020321	Big Deer Creek .....	Entire watershed.
Unit 15. Middle Salmon River-Chamberlain Creek subbasin.	1706020702	Wind River .....	Entire watershed.
	1706020707	Big Mallard Creek .....	Entire watershed.
Unit 17. Lower Salmon River subbasin .....	1706020917	Rice Creek .....	Entire watershed.
Unit 23. South Fork Clearwater River subbasin .....	1706030503	South Fork Clearwater River/Peasley Creek .....	Tributaries only.
	1706030512	Three Mile Creek .....	Entire watershed.
Unit 24. Clearwater River subbasin .....	1706030601	Lower Clearwater River .....	Tributaries only.

#### *Middle Columbia River O. mykiss ESU*

There are 111 watersheds within the spawning range of this ESU (for ease of reference these watersheds have been organized into 15 units based on their associated subbasin). Eleven watersheds received a low rating, 22 received a medium rating, and 78 received a high rating of conservation value to the ESU (NMFS, 2004a). The lower Columbia River corridor downstream of the spawning range was also considered to have a high conservation value.

There are 6,264 mi (10,081 km) of stream in the habitat areas of this ESU. Of these, 796 mi (1,281 km) of stream are within the boundaries of Indian reservations, but only those reaches defined as Indian lands (see *Government-to-Government Relationship With Tribes*) are proposed for exclusion. We have not calculated the potential reduction in estimated

economic impact as a result of these Indian land exclusions, but expect it would be small given the small percentage of stream miles these exclusions represent.

As a result of the balancing process for economic impacts described above, we are proposing to exclude from the designation the habitat areas shown in Table 12. Of the 6,264 mi (10,081 km) eligible for designation, 93 mi (150 km) are proposed for exclusion because the economic benefits of exclusion outweigh the benefits of designation. Total potential estimated economic impact is \$37,510,095. After exclusions the total estimated economic impact is \$34,556,978.

However, as indicated above, the Secretary is considering a number of additional exclusions which could reduce this economic impact to \$0. Twenty-seven of the HUC5 watersheds have a substantial amount of Federal

land subject to protection under the PACFISH management standards; another 16 of these watersheds have a moderate amount of such Federal land. Some of the eligible habitat is found within the mainstem of the Columbia River which is already subject to a comprehensive Federal salmonid management strategy, with participation by at least eight Federal agencies.

In both Washington and Oregon, there are many voluntary conservation activities underway throughout the ESU by Federal agencies (BOR in particular), state agencies and private citizens. We have noted recently that the ESU may be close to meeting recovery standards, and NOAA's scientists have consistently rated the degree of risk for this ESU the lowest among the listed salmonid species. The economy in the affected region of both states is primarily rural in nature, and is especially sensitive to additional land management burdens.

For these reasons, the benefits of excluding the eligible habitat in this

ESU may outweigh the benefits of designation as critical habitat.

TABLE 12.—FIFTH-FIELD WATERSHEDS OCCUPIED BY THE MIDDLE COLUMBIA RIVER *O. mykiss* ESU AND PROPOSED FOR FULL OR PARTIAL EXCLUSION FROM CRITICAL HABITAT. WATERSHEDS FOR WHICH TRIBUTARIES ONLY ARE EXCLUDED CONTAIN REARING/MIGRATION CORRIDORS NECESSARY FOR CONSERVATION

Subbasin/Unit	Watershed code	Watershed name	Area proposed for exclusion
Unit 5. Walla Walla River subbasin .....	1707010209	Pine Creek .....	Entire watershed.
Unit 6. Umatilla River subbasin .....	1707010304	Wildhorse Creek .....	Entire watershed.
Unit 7. Middle Columbia/Hood Rivers subbasin .....	1707010510	Little White Salmon River .....	Entire watershed.
Unit 12. Lower John Day River subbasin .....	1707020405	Lower John Day River/Clarno .....	Tributaries only.
	1707020409	Lower John Day River/Ferry Canyon .....	Tributaries only.
	1707020410	Lower John Day River/Scott Canyon .....	Tributaries only.
Unit 13. Lower Deschutes River subbasin .....	1707030610	White River .....	Entire watershed.

#### Lower Columbia River *O. mykiss* ESU

There are 41 watersheds within the spawning range of this ESU (for ease of reference these watersheds have been organized into nine units based on their associated subbasin). Two watersheds received a low rating, 11 received a medium rating, and 28 received a high rating of conservation value to the ESU (NMFS, 2004a). The lower Columbia River corridor downstream of the

spawning range was also considered to have a high conservation value.

As a result of the balancing process for economic impacts described above, we are proposing to exclude from the designation, at a minimum, the habitat areas shown in Table 13. Of the 2,656 mi (4,274 km) eligible for designation, no fewer than 229 mi (369 km) are proposed for exclusion because the economic benefits of exclusion outweigh the benefits of designation. Total potential estimated economic

impact is \$33,906,543. After exclusions the total estimated economic impact is \$26,618,626. However, as indicated above, the Secretary is considering a number of additional exclusions which may further reduce this economic impact by a substantial amount. For Lower Columbia River *O. mykiss*, a preliminary analysis of the economic impact of designating critical habitat after considering some of these additional exclusions indicates that it could be reduced to about \$3,600,000.

TABLE 13.—FIFTH-FIELD WATERSHEDS OCCUPIED BY THE LOWER COLUMBIA RIVER *O. mykiss* ESU AND PROPOSED FOR FULL OR PARTIAL EXCLUSION FROM CRITICAL HABITAT. WATERSHEDS FOR WHICH TRIBUTARIES ONLY ARE EXCLUDED CONTAIN REARING/MIGRATION CORRIDORS NECESSARY FOR CONSERVATION

Subbasin/Unit	Watershed code	Watershed name	Area proposed for exclusion
Unit 1. Middle Columbia/Hood Rivers subbasin .....	1707010512	Middle Columbia/Grays Creek .....	Tributaries only.
Unit 2. Lower Columbia/Sandy Rivers subbasin .....	1708000105	Bull Run River .....	Entire watershed.
	1708000107	Columbia Gorge Tributaries .....	Tributaries only.
	1708000109	Salmon Creek .....	Entire watershed.
Unit 7. Middle Willamette River subbasin .....	1709000704	Abernethy Creek .....	Entire watershed.

#### Upper Willamette River *O. mykiss* ESU

There are 34 watersheds within the spawning range of this ESU (for ease of reference these watersheds have been organized into seven units based on their associated subbasin). Sixteen watersheds received a low rating, 7 received a medium rating, and 11 received a high rating of conservation value to the ESU (NMFS, 2004a). The lower Willamette/Columbia River corridor downstream of the spawning range was also considered to have a high conservation value.

There are 1,822 mi (2,932 km) of stream in the 34 habitat areas for Upper Willamette River *O. mykiss*. Of these, 9 mi (15 km) of stream are within the

boundaries of Indian reservations, but only those reaches defined as Indian lands (see *Government-to-Government Relationship With Tribes*) are proposed for exclusion. We have not calculated the potential reduction in estimated economic impact as a result of these Indian land exclusions, but expect it would be small given the small percentage of stream miles these exclusions represent.

As a result of the balancing process for economic impacts described above, we are proposing to exclude from the designation, at a minimum, the habitat areas shown in Table 14. Of the 1,822 mi (2,932 km) eligible for designation, no fewer than 503 mi (810 km) are

proposed for exclusion because the economic benefits of exclusion outweigh the benefits of designation. Total potential estimated economic impact is \$11,159,514. After exclusions the total estimated economic impact is \$7,647,553. However, as indicated above, the Secretary is considering a number of additional exclusions which may further reduce this economic impact by a substantial amount. For Upper Willamette River *O. mykiss*, a preliminary analysis of the economic impact of designating critical habitat after considering some of these additional exclusions indicates that it could be reduced to about \$3,000,000.

TABLE 14.—FIFTH-FIELD WATERSHEDS OCCUPIED BY THE UPPER WILLAMETTE RIVER *O. mykiss* ESU AND PROPOSED FOR FULL OR PARTIAL EXCLUSION FROM CRITICAL HABITAT. WATERSHEDS FOR WHICH TRIBUTARIES ONLY ARE EXCLUDED CONTAIN REARING/MIGRATION CORRIDORS NECESSARY FOR CONSERVATION

Subbasin/Unit	Watershed code	Watershed name	Area proposed for exclusion
Unit 4. Middle Willamette River subbasin .....	1709000702	Rickreall Creek .....	Tributaries only.
	1709000703	Willamette River/Chehalem Creek .....	Tributaries only.
	1709000704	Abernethy Creek .....	Tributaries only.
Unit 5. Yamhill River subbasin .....	1709000802	Willamina Creek .....	Entire watershed.
	1709000805	Salt Creek/South Yamhill River .....	Entire watershed.
	1709000806	North Yamhill River .....	Entire watershed.
	1709000807	Yamhill River .....	Tributaries only.
Unit 6. Molalla/Pudding River subbasin .....	1709000901	Abiqua Creek/Pudding River .....	Entire watershed.
Unit 7. Tualatin River subbasin .....	1709001001	Dairy Creek .....	Entire watershed.
	1709001003	Scoggins Creek .....	Entire watershed.
	1709001004	Rock Creek/Tualatin River .....	Entire watershed.
	1709001005	Lower Tualatin River .....	Entire watershed.

## Effects of Critical Habitat Designation

### Section 7 Consultation

Section 7 of the ESA requires Federal agencies, including NMFS, to ensure that actions they fund, authorize, permit, or carry out do not destroy or adversely modify critical habitat. In agency regulations at 50 CFR 402.02, we define destruction or adverse modification as “a direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species. Such alterations include, but are not limited to: Alterations adversely modifying any of those physical or biological features that were the basis for determining the habitat to be critical.” However, in a March 15, 2001, decision of the United States Court of Appeals for the Fifth Circuit (*Sierra Club v. U.S. Fish and Wildlife Service*, 243 F.3d 434 (5th Cir. 2001)), and an August 9, 2004 decision of the United States Court of Appeals for the Ninth Circuit (*Gifford Pinchot Task Force v. U.S. Fish and Wildlife*, No. 03–35279, the courts have found the agencies’ definition of destruction or adverse modification to be invalid. In response to this decision, we are reviewing this regulatory definition.

Section 7(a) of the ESA requires Federal agencies, including NMFS, to evaluate their actions with respect to any species that is proposed or listed as endangered or threatened and with respect to its critical habitat, if any is proposed or designated. Regulations implementing this provision of the ESA are codified at 50 CFR part 402. Section 7(a)(4) of the ESA requires Federal agencies to confer with us on any action that is likely to jeopardize the continued existence of a proposed species or result in the destruction or adverse modification of proposed critical habitat. Conference reports provide

conservation recommendations to assist the agency in eliminating conflicts that may be caused by the proposed action. The conservation recommendations in a conference report are advisory.

We may issue a formal conference report if requested by a Federal agency. Formal conference reports include an opinion that is prepared according to 50 CFR 402.14, as if the species were listed or critical habitat designated. We may adopt the formal conference report as the biological opinion when the species is listed or critical habitat designated, if no substantial new information or changes in the action alter the content of the opinion (*see* 50 CFR 402.10(d)).

If a species is listed or critical habitat is designated, ESA section 7(a)(2) requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of such a species or to destroy or adversely modify its critical habitat. If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency (action agency) must enter into consultation with us. Through this consultation, we would review actions to determine if they would destroy or adversely modify critical habitat.

If we issue a biological opinion concluding that a project is likely to result in the destruction or adverse modification of critical habitat, we will also provide reasonable and prudent alternatives to the project, if any are identifiable. Reasonable and prudent alternatives are defined at 50 CFR 402.02 as alternative actions identified during consultation that can be implemented in a manner consistent with the intended purpose of the action, that are consistent with the scope of the Federal agency’s legal authority and jurisdiction, that are economically and technologically feasible, and that we

believe would avoid destruction or adverse modification of critical habitat. Reasonable and prudent alternatives can vary from slight project modifications to extensive redesign or relocation of the project. Costs associated with implementing a reasonable and prudent alternative are similarly variable.

Regulations at 50 CFR 402.16 require Federal agencies to reinitiate consultation on previously reviewed actions in instances where critical habitat is subsequently designated and the Federal agency has retained discretionary involvement or control over the action or such discretionary involvement or control is authorized by law. Consequently, some Federal agencies may request reinitiation of consultation or conference with us on actions for which formal consultation has been completed, if those actions may affect designated critical habitat or adversely modify or destroy proposed critical habitat.

Activities on Federal lands that may affect these ESUs or their critical habitat will require ESA section 7 consultation. Activities on private or state lands requiring a permit from a Federal agency, such as a permit from the Corps under section 404 of the CWA, a section 10(a)(1)(B) permit from NMFS, or some other Federal action, including funding (*e.g.*, Federal Highway Administration (FHA) or Federal Emergency Management Agency (FEMA) funding), will also be subject to the section 7 consultation process. Federal actions not affecting listed species or critical habitat and actions on non-Federal and private lands that are not Federally funded, authorized, or permitted do not require section 7 consultation.

### Activities Affected by Critical Habitat Designation

Section 4(b)(8) of the ESA requires that we evaluate briefly and describe, in



any proposed or final regulation that designates critical habitat, those activities involving a Federal action that may adversely modify such habitat or that may be affected by such designation. As noted in the *Special Management Considerations or Protection* section above, we received several comments on the ANPR (68 FR 55926; September 29, 2003) regarding activities potentially affected by a critical habitat designation.

A wide variety of activities may affect critical habitat and, when carried out, funded, or authorized by a Federal agency, require that an ESA section 7 consultation be conducted. Such activities include, but are not limited to, those described in the Species Descriptions and Area Assessments section. Generally these include water and land management actions of Federal agencies (e.g., USFS, BLM, Corps, BOR), the FHA, NRCS, National Park Service (NPS), Bureau of Indian Affairs (BIA), and the Federal Energy Regulatory Commission (FERC)) and related or similar actions of other Federally regulated projects and lands, including livestock grazing allotments by the USFS and BLM; hydropower sites licensed by the FERC; dams built or operated by the Corps or BOR; timber sales and other vegetation management activities conducted by the USFS, BLM, and BIA; irrigation diversions authorized by the USFS and BLM; road building and maintenance activities authorized by the FHA, USFS, BLM, NPS, and BIA; and mining and road building/maintenance activities authorized by the states of Washington, Oregon, and Idaho. Other actions of concern include dredge and fill, mining, diking, and bank stabilization activities authorized or conducted by the Corps, habitat modifications authorized by the FEMA, and approval of water quality standards and pesticide labeling and use restrictions administered by the EPA.

The Federal agencies that will most likely be affected by this critical habitat designation include the USFS, BLM, BOR, Corps, FHA, NRCS, NPS, BIA, FEMA, EPA, and the FERC. This designation will provide these agencies, private entities, and the public with clear notification of critical habitat designated for listed salmonids and the boundaries of the habitat. This designation will also assist these agencies and others in evaluating the potential effects of their activities on listed salmon and their critical habitat and in determining if section 7 consultation with NMFS is needed.

As noted above, numerous private entities also may be affected by this critical habitat designation because of

the direct and indirect linkages to an array of Federal actions, including Federal projects, permits, and funding. For example, private entities may harvest timber or graze livestock on Federal land or have special use permits to convey water or build access roads across Federal land; they may require Federal permits to armor stream banks, construct irrigation withdrawal facilities, or build or repair docks; they may obtain water from Federally funded and operated irrigation projects; or they may apply pesticides that are only available with Federal agency approval. These activities will need to be analyzed with respect to their potential to destroy or adversely modify critical habitat. In some cases, proposed activities may require modifications that may result in decreases in activities such as timber harvest and livestock and crop production. The transportation and utilities sectors may need to modify the placement of culverts, bridges and utility conveyances (e.g., water, sewer and power lines) to avoid barriers to fish migration. Developments occurring in or near salmon streams (e.g., marinas, residential, or industrial facilities) that require Federal authorization or funding may need to be altered or built in a manner that ensures that critical habitat is not destroyed or adversely modified as a result of the construction, or subsequent operation, of the facility. These are just a few examples of potential impacts, but it is clear that the effects will encompass numerous sectors of private and public activities. If you have questions regarding whether specific activities will constitute destruction or adverse modification of critical habitat, contact NMFS (*see ADDRESSES and FOR FURTHER INFORMATION CONTACT*).

#### Public Comments Solicited

We intend that any final action resulting from this proposal will be as accurate and as effective as possible. Therefore, comments or suggestions from the public, other concerned governments and agencies, the scientific community, industry, or any other interested party concerning this proposed rule are hereby solicited. Comments particularly are sought concerning:

(1) Maps and specific information describing the amount, distribution, and use type (e.g., spawning, rearing, or migration) of salmon habitat in each ESU; as well as any additional information on occupied and unoccupied habitat areas.

(2) The reasons why any habitat should or should not be determined to

be critical habitat as provided by sections 3(5)(A) and 4(b)(2) of the ESA;

(3) Information regarding the benefits of excluding lands covered by Habitat Conservation Plans (ESA section 10(a)(1)(B) permits), including the regulatory burden designation may impose on landowners and the likelihood that exclusion of areas covered by existing plans will serve as an incentive for other landowners to develop plans covering their lands;

(4) Information regarding the benefits of excluding Federal and other lands covered by habitat conservation strategies and plans (e.g. Northwest Forest Plan, Washington's Forest and Fish Plan, and the Oregon Plan), including the regulatory burden designation may impose on land managers and the likelihood that exclusion of areas covered by existing plans will serve as an incentive for land users to implement the conservation measures covering the lands subject to these plans;

(5) Information regarding the benefits of designating particular areas as critical habitat;

(6) Current or planned activities in the areas proposed for designation and their possible impacts on proposed critical habitat;

(7) Any foreseeable economic or other potential impacts resulting from the proposed designations, in particular, any impacts on small entities;

(8) Whether our approach to critical habitat designation could be improved or modified in any way to provide for greater public participation and understanding, or to assist us in accommodating public concern and comments; and

(9) Whether specific unoccupied areas (e.g., dewatered stream reaches, areas behind dikes or dams) not presently proposed for designation may be essential to provide additional spawning and rearing areas for an ESU. In particular we are seeking information regarding potential habitat areas in the Lemhi River and Pahsimeroi River subbasins in Idaho. Dam-related areas identified by the Teams as possibly being essential for conservation and for which we are seeking information include:

*Lower Columbia River Chinook Salmon ESU:* areas upstream of Bull Run, Condit, Merwin, Swift, and Yale dams;

*Upper Willamette River Spring-run Chinook Salmon ESU:* areas upstream of Big Cliff and Detroit dams;

*Upper Columbia River O. mykiss ESU:* areas upstream of Enloe Dam;

*Snake River O. mykiss ESU:* areas upstream of Dworshak Dam;

*Middle Columbia River O. mykiss* ESU: upper reaches of Wilson and Naneum creeks and areas upstream of Bumping, Cle Elum, Kacheelus, Kachess, and Tieton dams;

*Lower Columbia River O. mykiss* ESU: areas upstream of Bull Run, Condit, Merwin, Swift, and Yale dams.

If you wish to comment, you may submit your comments and materials concerning this proposal by any one of several methods (see **ADDRESSES** section). The proposed rule, maps, fact sheets, and other materials relating to this proposal can be found on our Web site at <http://www.nwr.noaa.gov/1salmon/salmesa/crithab/CHsite.htm>. We will consider all comments and information received during the comment period on this proposed rule as we prepare our final rulemaking. Accordingly, the final decision may differ from this proposal.

### Public Hearings

Joint Commerce-Interior ESA implementing regulations state that the Secretary shall promptly hold at least one public hearing if any person requests one within 45 days of publication of a proposed regulation to list a species or to designate critical habitat (see 50 CFR 424.16(c)(3)). Requests for public hearing must be made in writing (see **ADDRESSES**) by January 28, 2005. Due to the high likelihood of such requests we have already scheduled four public hearings on this proposed rule (see **DATES**). Details regarding the specific hearing locations, formats, and times will be posted by December 24, 2004, on our Web site at <http://www.nwr.noaa.gov/1salmon/salmesa/crithab/CHsite.htm>. These hearings will provide the opportunity for interested individuals and parties to give comments, exchange information and opinions, and engage in a constructive dialogue concerning this proposed rule. We encourage the public's involvement in such ESA matters.

### Peer Review

In accordance with an ESA policy published on July 1, 1994 (59 FR 34270), we will solicit the expert opinions of at least three appropriate independent specialists regarding this proposed rule. Given the varied considerations involved in making the proposed designations, we intend to solicit reviews from specialist(s) with biological expertise as well as specialist(s) with economic expertise in the geographic range of these ESUs. The purpose of such review is to ensure that the critical habitat designation is based on scientifically sound data,

assumptions, and analyses. We will send these reviewers copies of this proposed rule immediately following publication in the **Federal Register**. We will invite them to comment, during the public comment period, on the specific assumptions and conclusions regarding the proposed designation of critical habitat.

In response to the ANPR (68 FR 55926; September 29, 2003) we received the names of two potential independent reviewers and will identify other candidates prior to or soon after publishing this proposed rule. We will announce the availability of comments received from these reviewers and the public and make them available via the internet as soon as practicable during or after the comment period but in advance of a final rule.

### Required Determinations

#### Clarity of the Rule

Executive Order 12866 requires each agency to write regulations and notices that are easy to understand. We invite your comments on how to make this proposed rule easier to understand, including answers to questions such as the following: (1) Are the requirements in the proposed rule clearly stated? (2) Does the proposed rule contain technical jargon that interferes with its clarity? (3) Does the format of the proposed rule (grouping and order of the sections, use of headings, paragraphing, etc.) aid or reduce its clarity? (4) Is the description of the notice in the **SUPPLEMENTARY INFORMATION** section of the preamble helpful in understanding the proposed rule? (5) What else could we do to make this proposed rule easier to understand? You may send comments on how we could make this proposed rule easier to understand to one of the addresses identified in the **ADDRESSES** section or via e-mail to: [critical.habitat.nwr@noaa.gov](mailto:critical.habitat.nwr@noaa.gov).

#### Regulatory Planning and Review

In accordance with Executive Order 12866, this document is a significant rule and has been reviewed by the Office of Management and Budget (OMB). As noted above, we have prepared several reports to support the exclusion process under section 4(b)(2) of the ESA. The economic costs of the proposed critical habitat designations are described in our draft economic report (NMFS, 2004c). The benefits of the proposed designations are described in the Critical Habitat Analytical Review Team report (NMFS, 2004a). This document uses a biologically-based ranking system for gauging the benefits

of applying section 7 of the ESA to particular watersheds. Because data are not available to express these benefits in monetary terms, we have adopted a cost-effectiveness framework, as outlined in a draft 4(b)(2) report (NMFS, 2004d). This approach is in accord with OMB's guidance on regulatory analysis (U.S. Office of Management and Budget, Circular A-4, Regulatory Analysis, September 17, 2003). By taking this approach, we seek to designate sufficient critical habitat to meet the biological goal of the ESA while imposing the least burden on society, as called for by E.O. 12866.

In assessing the overall cost of critical habitat designation for the 13 Pacific salmon and *O. mykiss* ESUs, the annual total impact figures given in the draft economic analysis (NMFS, 2004c) cannot be added together to obtain an aggregate annual impact. Because some watersheds are included in more than one ESU, a simple summation would entail duplication, resulting in an overestimate. Accounting for this duplication, the aggregate annual economic impact of the 13 proposed critical habitat designations is \$223,950,126 (in contrast to a \$264,727,857 aggregate annual economic impact from designating *all* areas considered in the 4(b)(2) process for these ESUs). These amounts include impacts that are co-extensive with the implementation of the jeopardy standard of section 7 (NMFS, 2004c).

#### Regulatory Flexibility Act (5 U.S.C. 601 et seq.)

Under the Regulatory Flexibility Act (5 U.S.C. 601 et seq., as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996), whenever an agency is required to publish a notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a regulatory flexibility analysis that describes the effects of the rule on small entities (*i.e.*, small businesses, small organizations, and small government jurisdictions). We have prepared a draft regulatory flexibility analysis and this document is available upon request (see **ADDRESSES**). This analysis estimates that the number of regulated small entities potentially affected by this proposed rulemaking ranges from zero to 2,720 depending on the ESU. If these areas are designated critical habitat, the estimated co-extensive costs of section 7 consultation incurred by small entities is estimated to range from \$2.3 thousand to \$60.4 million depending on the ESU. As described in the analysis, we considered various alternatives for designating critical habitat for these 13

ESUs. We considered and rejected the alternative of not designating critical habitat for any of the ESUs because such an approach did not meet the legal requirements of the ESA. We also examined and rejected an alternative in which all the potential critical habitat of the 13 Pacific salmon and steelhead ESUs is proposed for designation (*i.e.*, no areas are excluded) because many of the areas considered to have a low conservation value also had relatively high economic impacts that might be mitigated by excluding those areas from designation. A third alternative we examined and rejected would exclude all habitat areas with a low or medium conservation value. While this alternative furthers the goal of reducing economic impacts, it is not sensitive to the fact that for most ESUs, eliminating all habitat areas with low and medium conservation value is likely to significantly impede conservation. Moreover, for some habitat areas the incremental economic benefit from excluding that area is relatively small. Therefore, after considering these alternatives in the context of the section 4(b)(2) process of weighing benefits of exclusion against benefits of designation, we determined that the current proposal for designating critical habitat (*i.e.*, designating some but not all areas with low or medium conservation value) provides an appropriate balance of conservation and economic mitigation and that excluding the areas identified in this proposed rulemaking would not result in extinction of the ESUs. It is estimated that small entities could save from zero to \$20.2 million in compliance costs, depending on the ESU, if the areas proposed for exclusion in this proposed rule are excluded from designation.

#### *Executive Order 13211*

On May 18, 2001, the President issued an Executive Order on regulations that significantly affect energy supply, distribution, and use. Executive Order 13211 requires agencies to prepare Statements of Energy Effects when undertaking certain actions. This proposed rule may be a significant regulatory action under Executive Order 12866. At this time, however, we are unable to determine both the scope and the nature of the energy effects.

Nine of the ESUs under consideration for critical habitat designation occupy the Columbia River and most of these migrate through one or more of the hydropower dams comprising the FCRPS. In *National Wildlife Federation et al. v. National Marine Fisheries Service et al.*, the court remanded the 2000 Biological Opinion on the

operation of the FCRPS for salmon. This Biological Opinion establishes Reasonable and Prudent Alternatives for the operation of the FCRPS, many of which are likely to have significant energy effects. The court has established a November 30, 2004, deadline for the revised Biological Opinion. Until that time, we do not have sufficient information or certainty to estimate the energy effects of critical habitat designation for the 13 Pacific salmon ESUs. When such information is available and greater certainty exists about the effects of the revised 2000 Biological Opinion, we will assess the significance of the energy effects of this regulatory action and publish a notice of availability of this assessment (and request for comment) prior to a final rule.

#### *Unfunded Mandates Reform Act (2 U.S.C. 1501 et seq.)*

In accordance with the Unfunded Mandates Reform Act, we make the following findings:

(a) This proposed rule will not produce a Federal mandate. In general, a Federal mandate is a provision in legislation, statute or regulation that would impose an enforceable duty upon State, local, tribal governments, or the private sector and includes both "Federal intergovernmental mandates" and "Federal private sector mandates." These terms are defined in 2 U.S.C. 658(5)–(7). "Federal intergovernmental mandate" includes a regulation that "would impose an enforceable duty upon State, local, or tribal governments" with two exceptions. It excludes "a condition of federal assistance." It also excludes "a duty arising from participation in a voluntary Federal program," unless the regulation "relates to a then-existing Federal program under which \$500,000,000 or more is provided annually to State, local, and tribal governments under entitlement authority," if the provision would "increase the stringency of conditions of assistance" or "place caps upon, or otherwise decrease, the Federal Government's responsibility to provide funding" and the State, local, or tribal governments "lack authority" to adjust accordingly. (At the time of enactment, these entitlement programs were: Medicaid; AFDC work programs; Child Nutrition; Food Stamps; Social Services Block Grants; Vocational Rehabilitation State Grants; Foster Care, Adoption Assistance, and Independent Living; Family Support Welfare Services; and Child Support Enforcement.) "Federal private sector mandate" includes a regulation that "would impose an enforceable duty upon the private

sector, except (i) a condition of Federal assistance; or (ii) a duty arising from participation in a voluntary Federal program." The designation of critical habitat does not impose a legally binding duty on non-Federal government entities or private parties. Under the ESA, the only regulatory effect is that Federal agencies must ensure that their actions do not destroy or adversely modify critical habitat under section 7. While non-Federal entities who receive Federal funding, assistance, permits or otherwise require approval or authorization from a Federal agency for an action may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency. Furthermore, to the extent that non-Federal entities are indirectly impacted because they receive Federal assistance or participate in a voluntary Federal aid program, the Unfunded Mandates Reform Act would not apply; nor would critical habitat shift the costs of the large entitlement programs listed above to State governments.

(b) Due to current public knowledge of salmon protection and the prohibition against take of these species both within and outside of the designated areas, we do not anticipate that this proposed rule will significantly or uniquely affect small governments. As such, a Small Government Agency Plan is not required.

#### *Takings*

In accordance with Executive Order 12630, the proposed rule does not have significant takings implications. A takings implication assessment is not required. The designation of critical habitat affects only Federal agency actions. The proposed rule will not increase or decrease the current restrictions on private property concerning take of salmon. As noted above, due to widespread public knowledge of salmon protection and the prohibition against take of the species both within and outside of the designated areas, we do not anticipate that property values will be affected by the proposed critical habitat designations. While real estate market values may temporarily decline following designation, due to the perception that critical habitat designation may impose additional regulatory burdens on land use, we expect any such impacts to be short term (NMFS, 2004c). Additionally, critical habitat designation does not preclude development of HCPs and issuance of incidental take permits.

Owners of areas that are included in the designated critical habitat will continue to have the opportunity to use their property in ways consistent with the survival of listed salmon.

#### *Federalism*

In accordance with Executive Order 13132, this proposed rule does not have significant Federalism effects. A Federalism assessment is not required. In keeping with Department of Commerce policies, we requested information from, and coordinated development of, this proposed critical habitat designation with appropriate state resource agencies in Washington, Oregon, and Idaho. The proposed designation may have some benefit to the states and local resource agencies in that the areas essential to the conservation of the species are more clearly defined, and the primary constituent elements of the habitat necessary to the survival of the species are specifically identified. While making this definition and identification does not alter where and what Federally sponsored activities may occur, it may assist local governments in long-range planning (rather than waiting for case-by-case section 7 consultations to occur).

#### *Civil Justice Reform*

In accordance with Executive Order 12988, the Department of the Commerce has determined that this proposed rule does not unduly burden the judicial system and meets the requirements of sections 3(a) and 3(b)(2) of the Order. We are proposing to designate critical habitat in accordance with the provisions of the ESA. This proposed rule uses standard property descriptions and identifies the primary constituent elements within the designated areas to assist the public in understanding the habitat needs of the 13 salmon ESUs.

#### *Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.)*

This proposed rule does not contain new or revised information collection for which OMB approval is required under the Paperwork Reduction Act. This rule will not impose recordkeeping or reporting requirements on State or local governments, individuals, businesses, or organizations. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

#### *National Environmental Policy Act*

We have determined that we need not prepare environmental analyses as

provided for under the National Environmental Policy Act of 1969 for critical habitat designations made pursuant to the ESA. See *Douglas County v. Babbitt*, 48 F.3d 1495 (9th Cir. 1995), cert. denied, 116 S.Ct. 698 (1996).

#### *Government-to-Government Relationship With Tribes*

The longstanding and distinctive relationship between the Federal and tribal Governments is defined by treaties, statutes, executive orders, judicial decisions, and agreements, which differentiate tribal governments from the other entities that deal with, or are affected by, the Federal Government. This relationship has given rise to a special Federal trust responsibility involving the legal responsibilities and obligations of the United States toward Indian Tribes and the application of fiduciary standards of due care with respect to Indian lands, tribal trust resources, and the exercise of tribal rights. Pursuant to these authorities lands have been retained by Indian Tribes or have been set aside for tribal use. These lands are managed by Indian Tribes in accordance with tribal goals and objectives within the framework of applicable treaties and laws.

Administration policy contained in the Secretarial Order: "American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act" (June 5, 1997) ("Secretarial Order"); the President's Memorandum of April 29, 1994, "Government-to-Government Relations with Native American Tribal Governments" (50 FR 2291); Executive Order 13175; and Department of Commerce—American Indian and Alaska Native Policy (March 30, 1995) reflects and defines this unique relationship.

These policies also recognize the unique status of Indian lands. The Presidential Memorandum of April 29, 1994, provides that, to the maximum extent possible, tribes should be the governmental entities to manage their lands and tribal trust resources. The Secretarial Order provides that, "Indian lands are not Federal public lands or part of the public domain, and are not subject to Federal public lands laws."

In implementing these policies the Secretarial Order specifically seeks to harmonize this unique working relationship with the Federal Government's duties pursuant to the ESA. The order clarifies our responsibilities when carrying out authorities under the ESA and requires that we consult with and seek participation of, the affected Indian Tribes to the maximum extent practicable in the designation of critical

habitat. Accordingly, we recognize that we must carry out our responsibilities under the ESA in a manner that harmonizes these duties with the Federal trust responsibility to the tribes and tribal sovereignty while striving to ensure that Indian Tribes do not bear a disproportionate burden for the conservation of species. Any decision to designate Indian land as critical habitat must be informed by the Federal laws and policies establishing our responsibility concerning Indian lands, treaties and trust resources, and by Department of Commerce policy establishing our responsibility for dealing with tribes when we implement the ESA.

For Pacific salmon in the Northwest, our approach is also guided by the unique partnership between the Federal Government and Indian tribes regarding salmon management. Northwest Indian tribes are regarded as "co-managers" of the salmon resource, along with Federal and state managers. This co-management relationship evolved as a result of numerous court decisions establishing the tribes' treaty right to take fish in their usual and accustomed places.

The co-manager relationship is embodied in a number of long-term ongoing management processes; examples include (but are not limited to): Joint Resource Management Plans such as Salmon Fisheries and Steelhead Net Fisheries Affecting Puget Sound Chinook Salmon in 2003–2004 and Puget Sound Comprehensive Chinook Management Plan: Harvest Management Component; Tribal Resource Management Plans such as Tribal Chinook Research in Puget Sound, Washington, Tribal Resource Management Plan for Threatened Snake River Spring/Summer Chinook on the Imnaha River Subbasin in 2002–2003, and Tribal Resource Management Plan for Snake River Spring/Summer Chinook in the Grand Ronde River in Northeast Oregon; Pacific Management Council and Pacific Salmon Commission; *United States v. Oregon* and *United States v. Washington* court-supervised processes; and in-season management of Columbia River and Puget Sound/Washington Coast fisheries. Similarly there are partnership examples in the artificial propagation, habitat, hydropower, and recovery planning areas of salmonid conservation and protection efforts (NMFS, 2004e).

Pursuant to the Secretarial Order we consulted with the affected Indian Tribes when considering the designation of critical habitat in an area that may impact tribal trust resources, tribally owned fee lands or the exercise

of tribal rights. Additionally many tribes provided written comments that are a part of the administrative record for this proposed rulemaking.

We understand from the tribes that there is general agreement that Indian lands should not be designated critical habitat. The Secretarial Order defines Indian lands as “any lands title to which is either: (1) held in trust by the United States for the benefit of any Indian tribe or (2) held by an Indian Tribe or individual subject to restrictions by the United States against alienation.” In clarifying this definition with the tribes, we agree that (1) fee lands within the reservation boundaries and owned by the Tribe or individual Indian, and (2) fee lands outside the reservation boundaries and owned by the Tribe would be considered Indian lands for the purposes of this proposed rule. (Fee lands outside the reservation owned by individual Indians are not included within the definition of Indian lands for the purposes of this rule.)

Several tribes provided documentation that there are no fish bearing waters on their tribal lands and as such contend that these lands do not constitute critical habitat. Having reviewed this documentation we agree and do not include these lands in the critical habitat designation (*see* Application of ESA section 4(b)(2)).

In evaluating the remaining Indian lands for designation as critical habitat we look to section 4(b)(2) of the ESA. Section 4(b)(2) requires us to base critical habitat designations on the best scientific and commercial data available, after taking into consideration the economic impact, the impact on national security and any other relevant impact of specifying any particular area as critical habitat. The Secretary may exclude areas from a critical habitat designation when the benefits of exclusion outweigh the benefits of designation, provided the exclusion will not result in the extinction of the species. We find that a relevant impact for consideration is the degree to which the Federal designation of Indian lands would impact the longstanding unique

relationship between the tribes and the Federal Government and the corresponding effect on Pacific salmon protection and management (See Other Relevant Impacts and Critical Habitat Designation sections). This is consistent with recent case law addressing the designation of critical habitat on tribal lands. “It is certainly reasonable to consider a positive working relationship relevant, particularly when the relationship results in the implementation of beneficial natural resource programs, including species preservation.” *Center for Biological Diversity et. al. v. Norton*, 240 F. Supp. 2d 1090, 1105; *Douglas County v. Babbitt*, 48 F3d 1495, 1507 (1995) (defining “relevant” as impacts consistent with the purposes of the ESA).

As noted above, the northwest Federal and tribal governments currently have cooperative working relationships that have enabled us to implement natural resource programs of mutual interest for the benefit of threatened and endangered salmonids. The tribes have existing natural resource programs that assist us on a regular basis in providing information relevant to salmonid protection throughout the region. Our consultation with the tribes and a series of letters and analyses they have provided indicates that they view the designation of Indian lands as an unwanted intrusion into tribal self-governance, compromising the government-to-government relationship that is essential to achieving our mutual goal of conserving threatened and endangered salmonids. Further, the tribes indicate that their participation in existing co-manager processes will be compromised by the designation of their lands as they have limited staff and resources.

At this time, for the general reasons described above, we anticipate that the ESA 4(b)(2) analysis will lead us to exclude all Indian lands in our final designation for these 13 ESUs of salmon and *O. mykiss*. Consistent with other proposed exclusions, any exclusion in

the final rule will be made only after consideration of all comments received.

#### References Cited

A complete list of all references cited in this rulemaking can be found on our Web site at <http://www.nwr.noaa.gov/1salmon/salmesa/crithab/CHsite.htm> and is available upon request from the NMFS office in Portland, Oregon (*see* ADDRESSES section).

#### List of Subjects in 50 CFR Part 226

Endangered and threatened species.

Dated: November 29, 2004.

**William T. Hogarth,**

*Assistant Administrator for Fisheries,  
National Marine Fisheries Service.*

For the reasons set out in the preamble, we propose to amend part 226, title 50 of the Code of Federal Regulations as set forth below:

#### PART 226—[AMENDED]

1. The authority citation of part 226 continues to read as follows:

**Authority:** 16 U.S.C. 1533.

2. Add § 226.212 to read as follows:

#### **§ 226.212 Critical habitat for 13 Evolutionarily Significant Units (ESUs) of salmon (*Oncorhynchus* spp.) in Washington, Oregon and Idaho.**

Critical habitat is designated in the following states and counties for the following ESUs as described in paragraph (a) of this section, and as further described in paragraphs (b) through (e) of this section. The textual descriptions of critical habitat for each ESU are included in paragraphs (f) through (r) of this section, and these descriptions are the definitive source for determining the critical habitat boundaries. General location maps are provided at the end of each ESU description (paragraphs (f) through (r) of this section) and are provided for general guidance purposes only, and not as a definitive source for determining critical habitat boundaries.

(a) Critical habitat is designated for the following ESUs in the following states and counties:

ESU	State—Counties
(1) Puget Sound chinook salmon .....	WA—Chelan, Clallam, Grays Harbor, Island, Jefferson, King, Kittitas, Mason, Pierce, Skagit, Snohomish, Thurston, Whatcom, and Yakima.
(2) Lower Columbia River chinook salmon .....	(i) OR—Clackamas, Clatsop, Columbia, Hood River, Multnomah, Wasco, and Washington. (ii) WA—Clark, Cowlitz, Klickitat, Lewis, Pacific, Pierce, Skamania, Wahkiakum, and Yakima.
(3) Upper Willamette River chinook salmon .....	(i) OR—Benton, Clackamas, Clatsop, Columbia, Deschutes, Douglas, Jefferson, Klamath, Lane, Lincoln, Linn, Marion, Multnomah, Polk, Wasco, Washington, and Yamhill. (ii) WA—Clark, Cowlitz, Pacific, and Wahkiakum.
(4) Upper Columbia River spring-run chinook salmon.	(i) OR—Clatsop, Columbia, Gilliam, Hood River, Morrow, Multnomah, Sherman, Umatilla, and Wasco.

ESU	State—Counties
(5) Oregon Coast coho salmon .....	(ii) WA—Adams, Benton, Chelan, Clark, Cowlitz, Douglas, Franklin, Grant, King, Kittitas, Klickitat, Okanogan, Pacific, Skagit, Skamania, Snohomish, Wahkiakum, Walla Walla, Whatcom, and Yakima. OR—Benton, Clatsop, Columbia, Coos, Curry, Douglas, Jackson, Josephine, Lane, Lincoln, Polk, Tillamook, Washington, and Yamhill.
(6) Hood Canal summer-run chum salmon .....	WA—Clallam, Jefferson, Kitsap, and Mason.
(7) Columbia River chum salmon .....	(i) OR—Clatsop, Columbia, Hood River, Multnomah, and Wasco. (ii) WA—Clark, Cowlitz, Klickitat, Lewis, Pacific, Skamania, Wahkiakum, and Yakima.
(8) Ozette Lake sockeye salmon .....	WA—Clallam.
(9) Upper Columbia River <i>O. mykiss</i> .....	(i) OR—Clatsop, Columbia, Gilliam, Hood River, Morrow, Multnomah, Sherman, Umatilla, and Wasco. (ii) WA—Adams, Benton, Chelan, Clark, Cowlitz, Douglas, Franklin, Grant, King, Kittitas, Klickitat, Okanogan, Pacific, Skagit, Skamania, Snohomish, Wahkiakum, Walla Walla, Whatcom, and Yakima.
(10) Snake River Basin <i>O. mykiss</i> .....	(i) ID—Adams, Blaine, Boise, Camas, Clearwater, Custer, Elmore, Idaho, Latah, Lemhi, Lewis, Nez Perce, and Valley. (ii) OR—Baker, Clatsop, Columbia, Gilliam, Grant, Hood River, Morrow, Multnomah, Sherman, Umatilla, Union, Wallowa, and Wasco.
(11) Middle Columbia River <i>O. mykiss</i> .....	(iii) WA—Adams, Asotin, Benton, Clark, Columbia, Cowlitz, Franklin, Garfield, Klickitat, Pacific, Skamania, Walla Walla, Wahkiakum, Whitman, and Yakima. (i) OR—Baker, Clackamas, Clatsop, Columbia, Crook, Gilliam, Grant, Hood River, Jefferson, Marion, Morrow, Multnomah, Sherman, Umatilla, Union, Wallowa, Wasco, and Wheeler.
(12) Lower Columbia River <i>O. mykiss</i> .....	(ii) WA—Benton, Chelan, Clark, Cowlitz, Columbia, Franklin, King, Kittitas, Klickitat, Lewis, Pacific, Pierce, Skamania, Wahkiakum, Walla Walla, and Yakima.
(13) Upper Willamette River <i>O. mykiss</i> .....	(i) OR—Clackamas, Clatsop, Columbia, Hood River, Jefferson, Marion, Multnomah, Wasco, and Washington. (ii) WA—Clark, Cowlitz, Klickitat, Lewis, Pacific, Pierce, Skamania, Wahkiakum, and Yakima. (i) OR—Benton, Clackamas, Clatsop, Columbia, Lane, Lincoln, Linn, Marion, Multnomah, Polk, Tillamook, Washington, and Yamhill. (ii) WA—Clark, Cowlitz, Pacific, and Wahkiakum.

(b) *Critical habitat boundaries.*

Critical habitat includes the stream channels within the proposed stream reaches, and includes a lateral extent as defined by the ordinary high-water line (33 CFR 319.11). In areas where ordinary high-water line has not been defined, the lateral extent will be defined by the bankfull elevation. Bankfull elevation is the level at which water begins to leave the channel and move into the floodplain and is reached at a discharge which generally has a recurrence interval of 1 to 2 years on the annual flood series. Critical habitat in lake areas is defined by the perimeter of the water body as displayed on standard 1:24,000 scale topographic maps or the elevation of ordinary high water, whichever is greater. In estuarine and nearshore marine areas critical habitat is proposed to include areas contiguous with the shoreline from the line of extreme high water out to a depth no greater than 30 meters relative to mean low water.

(c) *Primary constituent elements.*

Within these areas, the primary constituent elements essential for the conservation of these ESUs are those sites and habitat components that support one or more life stages, including:

(1) Freshwater spawning sites with water quantity and quality conditions and substrate supporting spawning, incubation and larval development;

(2) Freshwater rearing sites with:

(i) Water quantity and floodplain connectivity to form and maintain physical habitat conditions and support juvenile growth and mobility;

(ii) Water quality and forage supporting juvenile development; and

(iii) Natural cover such as shade, submerged and overhanging large wood, log jams and beaver dams, aquatic vegetation, large rocks and boulders, side channels, and undercut banks.

(3) Freshwater migration corridors free of obstruction and excessive predation with water quantity and quality conditions and natural cover such as submerged and overhanging large wood, aquatic vegetation, large rocks and boulders, side channels, and undercut banks supporting juvenile and adult mobility and survival;

(4) Estuarine areas free of obstruction and excessive predation with:

(i) Water quality, water quantity, and salinity conditions supporting juvenile and adult physiological transitions between fresh- and saltwater;

(ii) Natural cover such as submerged and overhanging large wood, aquatic vegetation, large rocks and boulders, side channels; and

(iii) Juvenile and adult forage, including aquatic invertebrates and fishes, supporting growth and maturation.

(5) Nearshore marine areas free of obstruction and excessive predation with:

(i) Water quality and quantity conditions and forage, including aquatic invertebrates and fishes, supporting growth and maturation; and

(ii) Natural cover such as submerged and overhanging large wood, aquatic vegetation, large rocks and boulders, and side channels.

(6) Offshore marine areas with water quality conditions and forage, including aquatic invertebrates and fishes, supporting growth and maturation.

(d) *Exclusion of Indian lands.* Critical habitat does not include habitat areas on Indian lands. The Indian lands specifically excluded from critical habitat are those defined in the Secretarial Order, including:

(1) Lands held in trust by the United States for the benefit of any Indian tribe;

(2) Land held in trust by the United States for any Indian Tribe or individual subject to restrictions by the United States against alienation;

(3) Fee lands, either within or outside the reservation boundaries, owned by the tribal government; and

(4) Fee lands within the reservation boundaries owned by individual Indians.

(e) *Land owned or controlled by the Department of Defense.* Additionally, critical habitat does not include the following areas owned or controlled by

the Department of Defense, or designated for its use, in the State of Washington:

- (1) Naval Submarine Base, Bangor;
  - (2) Naval Undersea Warfare Center, Keyport;
  - (3) Naval Ordinance Center, Port Hadlock (Indian Island);
  - (4) Naval Radio Station, Jim Creek;
  - (5) Naval Fuel Depot, Manchester;
  - (6) Naval Air Station Whidbey Island;
  - (7) Naval Air Station, Everett;
  - (8) Bremerton Naval Hospital;
  - (9) Fort Lewis (Army);
  - (10) Pier 23 (Army);
  - (11) Yakima Training Center (Army);
  - (12) Puget Sound Naval Shipyard;
  - (13) Naval Submarine Base Bangor security zone;
  - (14) Strait of Juan de Fuca naval air-to-surface weapon range, restricted area;
  - (15) Hood Canal and Dabob Bay naval non-explosive torpedo testing area;
  - (16) Strait of Juan de Fuca and Whidbey Island naval restricted areas;
  - (17) Admiralty Inlet naval restricted area;
  - (18) Port Gardner Naval Base restricted area;
  - (19) Hood Canal naval restricted areas;
  - (20) Port Orchard Passage naval restricted area;
  - (21) Sinclair Inlet naval restricted areas;
  - (22) Carr Inlet naval restricted areas;
  - (23) Dabob Bay/Whitney Point naval restricted area; and
  - (24) Port Townsend/Indian Island/Walan Point naval restricted area.
- (f) *Puget Sound Chinook Salmon (Oncorhynchus tshawytscha)*. Critical habitat is proposed to include the areas defined in the following units:
- (1) *Unit 2. Nooksack Subbasin 17110004—(i) Upper North Fork Nooksack River Watershed 1711000401*. Outlet(s) = North Fork Nooksack River (Lat 48.9055, Long -121.9886) upstream to endpoint(s) in: Boyd Creek (48.8998, -121.8640); Canyon Creek (48.9366, -121.9451); Cascade Creek (48.8996, -121.8621); Cornell Creek (48.8882, -121.9594); Deadhorse Creek (48.9024, -121.8359); Gallop Creek (48.8849, -121.9447); Glacier Creek (48.8197, -121.8931); Hedrick Creek (48.8953, -121.9705); Thompson Creek (48.8837, -121.9028); Wells Creek (48.8940, -121.7976).
  - (ii) *Middle Fork Nooksack River Watershed 1711000402*. Outlet(s) = Middle Fork Nooksack River (Lat 48.8342, Long -122.1540) upstream to endpoint(s) in: Canyon Creek (48.8374, -122.1198); Middle Fork Nooksack River (48.7714, -122.0709); Porter Creek (48.7951, -122.1098); Unnamed (48.7809, -122.1157); Unnamed (48.7860, -122.1214).

- (iii) *South Fork Nooksack River Watershed 1711000403*. Outlet(s) = South Fork Nooksack River (Lat 48.8095, Long -122.2026) upstream to endpoint(s) in: Black Slough (48.7715, -122.1931); Cavanaugh Creek (48.6446, -122.1094); Deer Creek (48.6041, -122.0912); Edfro Creek (48.6607, -122.1206); Fobes Creek (48.6230, -122.1139); Hard Scrabble Falls Creek (48.7601, -122.2273); Howard Creek (48.6118, -121.9639); Hutchinson Creek (48.7056, -122.1663); Jones Creek (48.7186, -122.2130); McCarty Creek (48.7275, -122.2188); Plumbago Creek (48.6088, -122.0949); Pond Creek (48.6958, -122.1651); Skookum Creek (48.6871, -122.1029); South Fork Nooksack River (48.6133, -121.9000); Standard Creek (48.7444, -122.2191); Sygitowicz Creek (48.7722, -122.2269); Unnamed (48.6048, -121.9143); Unnamed (48.6213, -122.1039); Unnamed (48.7174, -122.1815); Unnamed (48.7231, -122.1968); Unnamed (48.7843, -122.2188).
- (iv) *Lower North Fork Nooksack River Watershed 1711000404*. Outlet(s) = Nooksack River (Lat 48.8711, Long -122.3227) upstream to endpoint(s) in: Anderson Creek (48.8088, -122.3410); Boulder Creek (48.9314, -122.0258); Coal Creek (48.8889, -122.1506); Kendall Creek (48.9251, -122.1455); Kenney Creek (48.8510, -122.1368); Macaulay Creek (48.8353, -122.2345); Maple Creek (48.9262, -122.0751); Mitchell Creek (48.8313, -122.2174); North Fork Nooksack River (48.9055, -121.9886); Racehorse Creek (48.8819, -122.1272); Smith Creek (48.8439, -122.2544); Unnamed (48.8103, -122.1855); Unnamed (48.9002, -122.1205); Unnamed (48.9040, -122.0875); Unnamed (48.9131, -122.0127); Unnamed (48.9158, -122.0091); Unnamed (48.9162, -122.0615); Unnamed (48.9200, -122.0463); Wildcat Creek (48.9058, -121.9995); Deer Creek (48.8439, -122.4839).
- (v) *Nooksack River Watershed 1711000405*. Outlet(s) = Lummi River (Lat 48.8010, Long -122.6582); Nooksack River (48.7737, -122.5986); Silver Creek (48.7786, -122.5635); Slater Slough (48.7759, -122.6029); Unnamed (48.7776, -122.5708); Unnamed (48.7786, -122.5677); Unnamed (48.7973, -122.6717); Unnamed (48.8033, -122.6771) upstream to endpoint(s) in: Fishtrap Creek (49.0025, -122.4053); Fourmile Creek (48.8890, -122.4213); Lummi River (48.8198, -122.6049); Nooksack River (48.8711, -122.3227); Pepin Creek (49.0024, -122.4724); Slater Slough (48.7778, -122.6041); Tenmile Creek (48.8457, -122.3661); Unnamed

- (48.8191, -122.5705); Unnamed (48.8453, -122.6071); Unnamed (48.8548, -122.4749); Unnamed (48.9609, -122.5312); Unnamed (48.9634, -122.3928); Unnamed (49.0024, -122.4730); Unnamed (49.0025, -122.5218).
- (2) *Unit 3. Upper Skagit Subbasin 17110005—(i) Skagit River/Gorge Lake Watershed 1711000504*. Outlet(s) = Skagit River (Lat 48.6725, Long -121.2633) upstream to endpoint(s) in: Goodell Creek (48.6890, -121.2718); Skagit River (48.6763, -121.2404).
- (ii) *Skagit River/Diobsud Creek Watershed 1711000505*. Outlet(s) = Skagit River (Lat 48.5218, Long -121.4315) upstream to endpoint(s) in: Bacon Creek (48.6456, -121.4244); Diobsud Creek (48.5761, -121.4309); Falls Creek (48.6334, -121.4258); Skagit River (48.6725, -121.2633).
- (iii) *Cascade River Watershed 1711000506*. Outlet(s) = Cascade River (Lat 48.5218, Long -121.4315) upstream to endpoint(s) in: Found Creek (48.4816, -121.2437); Kindy Creek (48.4613, -121.2094); Marble Creek (48.5398, -121.2612); North Fork Cascade River (48.4660, -121.1641); South Fork Cascade River (48.4592, -121.1494).
- (iv) *Skagit River/Illabot Creek Watershed 1711000507*. Outlet(s) = Skagit River (Lat 48.5333, Long -121.7370) upstream to endpoint(s) in: Illabot Creek (48.4498, -121.4551); Jackman Creek (48.5294, -121.6957); Skagit River (48.5218, -121.4315); Unnamed (48.5013, -121.6598).
- (3) *Unit 4. Sauk Subbasin 17110006—(i) Upper Sauk River Watershed 1711000601*. Outlet(s) = Sauk River (Lat 48.1731, Long -121.4714) upstream to endpoint(s) in: Camp Creek (48.1559, -121.2909); North Fork Sauk River (48.0962, -121.3710); Owl Creek (48.1623, -121.2948); South Fork Sauk River (48.0670, -121.4088); Swift Creek (48.1011, -121.3975); Unnamed (48.1653, -121.3288); White Chuck River (48.1528, -121.2645).
- (ii) *Upper Suitttle River Watershed 1711000602*. Outlet(s) = Suitttle River (Lat 48.2586, Long -121.2237) upstream to endpoint(s) in: Downey Creek (48.2828, -121.2083); Milk Creek (48.2207, -121.1634); Suitttle River (48.2211, -121.1609); Sulphur Creek (48.2560, -121.1773); Unnamed (48.2338, -121.1792).
- (iii) *Lower Suitttle River Watershed 1711000603*. Outlet(s) = Suitttle River (Lat 48.3384, Long -121.5482) upstream to endpoint(s) in: Big Creek (48.3435, -121.4416); Buck Creek (48.2753, -121.3268); Circle Creek (48.2555, -121.3395); Lime Creek (48.2445, -121.2933); Straight Creek



(48.2594; – 121.4009); Suitttle River (48.2586, – 121.2237); Tenas Creek (48.3371, – 121.4304).

(iv) *Lower Sauk River Watershed 1711000604*. Outlet(s) = Sauk River (Lat 48.4821, Long – 121.6060) upstream to endpoint(s) in: Dan Creek (48.2702, – 121.5473); Sauk River (48.1731, – 121.4714); Unnamed (48.2247, – 121.5826); Unnamed (48.3187, – 121.5480).

(4) Unit 5. Lower Skagit Subbasin 17110007—(i) *Middle Skagit River/Finney Creek Watershed 1711000701*. Outlet(s) = Skagit River (Lat 48.4891, Long – 122.2178) upstream to endpoint(s) in: Alder Creek (48.5280, – 121.9498); Day Creek (48.4689, – 122.0216); Finney Creek (48.4655, – 121.6858); Grandy Creek (48.5510, – 121.8621); Hansen Creek (48.5600, – 122.2069); Jims Slough (48.5274, – 122.0227); Jones Creek (48.5418, – 122.0494); Mannser Creek (48.5260, – 122.0430); Muddy Creek (48.5278, – 122.0007); Pressentin Creek (48.5099, – 121.8449); Skagit River (48.5333, – 121.7370); Sorenson Creek (48.4875, – 122.1029); Unnamed (48.4887, – 122.0747); Unnamed (48.5312, – 122.0149); Wiseman Creek (48.5160, – 122.1286).

(ii) *Lower Skagit River/Nookachamps Creek Watershed 1711000702*. Outlet(s) = Browns Slough (Lat 48.3305, Long – 122.4194); Freshwater Slough (48.3109, – 122.3883); Hall Slough (48.3394, – 122.4426); Isohis Slough (48.2975, – 122.3711); North Fork Skagit River (48.3625, – 122.4689); South Fork Skagit River (48.2920, – 122.3670); Unnamed (48.3085, – 122.3868); Unnamed (48.3831, – 122.4842) upstream to endpoint(s) in: Britt Slough (48.3935, – 122.3571); Browns Slough (48.3411, – 122.4127); East Fork Nookachamps Creek (48.4044, – 122.1790); Hall Slough (48.3437, – 122.4376); Mundt Creek (48.4249, – 122.2007); Skagit River (48.4891, – 122.2178); Unnamed (48.3703, – 122.3081); Unnamed (48.3827, – 122.1893); Unnamed (48.3924, – 122.4822); Walker Creek (48.3778, – 122.1899).

(5) Unit 6. Stillaguamish Subbasin 17110008—(i) *North Fork Stillaguamish River Watershed 1711000801*. Outlet(s) = North Fork Stillaguamish River (Lat 48.2037, Long – 122.1256) upstream to endpoint(s) in: Ashton Creek (48.2545, – 121.6708); Boulder River (48.2624, – 121.8090); Deer Creek (48.2835, – 121.9255); French Creek (48.2534, – 121.7856); Furland Creek (48.2624, – 121.6749); Grant Creek (48.2873, – 122.0118); North Fork Stillaguamish River (48.3041, – 121.6360); Rollins Creek (48.2908, – 121.8441); Squire

Creek (48.2389, – 121.6374); Unnamed (48.2393, – 121.6285); Unnamed (48.2739, – 121.9948).

(ii) *South Fork Stillaguamish River Watershed 1711000802*. Outlet(s) = South Fork Stillaguamish River (Lat 48.2037, Long – 122.1256) upstream to endpoint(s) in: Canyon Creek (48.1107, – 121.9677); Jim Creek (48.2230, – 121.9483); Siberia Creek (48.1731, – 122.0377); South Fork Stillaguamish River (48.1026, – 121.9610); Unnamed (48.1463, – 122.0162).

(iii) *Lower Stillaguamish River Watershed 1711000803*. Outlet(s) = Stillaguamish River (Lat 48.2385, Long – 122.3749); Unnamed (48.1983, – 122.3579) upstream to endpoint(s) in: Armstrong Creek (48.2189, – 122.1347); Pilchuck Creek (48.2983, – 122.1672); Stillaguamish River (48.2037, – 122.1256).

(6) Unit 7. Skykomish Subbasin 17110009—(i) *Tye and Beckler River Watershed 1711000901*. Outlet(s) = South Fork Skykomish River (Lat 47.7147, Long – 121.3393) upstream to endpoint(s) in: East Fork Foss River (47.6522, – 121.2792); Rapid River (47.8131, – 121.2470) Tye River (47.7172, – 121.2254) Unnamed (47.8241, – 121.2979); West Fork Foss River (47.6444, – 121.2972).

(ii) *Skykomish River Forks Watershed 1711000902*. Outlet(s) = North Fork Skykomish River (Lat 47.8133, Long – 121.5782) upstream to endpoint(s) in: Bridal Veil Creek (47.7987, – 121.5597); Lewis Creek (47.8223, – 121.5160); Miller River (47.7018, – 121.3950); Money Creek (47.7208, – 121.4062); North Fork Skykomish River (47.9183, – 121.3073); South Fork Skykomish River (47.7147, – 121.3393); Unnamed (47.7321, – 121.4176); Unnamed (47.8002, – 121.5548).

(iii) *Skykomish River/Wallace River Watershed 1711000903*. Outlet(s) = Skykomish River (Lat 47.8602, Long – 121.8190) upstream to endpoint(s) in: Deer Creek (47.8191, – 121.5805); Olney Creek (47.8796, – 121.7163); Proctor Creek (47.8216, – 121.6460); Skykomish River (47.8133, – 121.5782); Unnamed (47.8507, – 121.8010); Wagleys Creek (47.8674, – 121.7972); Wallace River (47.8736, – 121.6491).

(iv) *Sultan River Watershed 1711000904*. Outlet(s) = Sultan River (Lat 47.8602, Long – 121.8190) upstream to endpoint(s) in: Sultan River (47.9598, – 121.7951).

(v) *Skykomish River/Woods Creek Watershed 1711000905*. Outlet(s) = Skykomish River (Lat 47.8303, Long – 122.0451) upstream to endpoint(s) in: Elwell Creek (47.8038, – 121.8524); Skykomish River (47.8602, – 121.8190); Unnamed (47.8890, – 121.8637); West

Fork Woods Creek (47.9627, – 121.9707); Woods Creek (47.8953, – 121.8742); Youngs Creek (47.8081, – 121.8332).

(7) Unit 8. Snoqualmie Subbasin 17110010—(i) *Middle Fork Snoqualmie River Watershed 1711001003*. Outlet(s) = Snoqualmie River (Lat 47.6407, Long – 121.9261) upstream to endpoint(s) in: Canyon Creek (47.5837, – 121.9623); Deep Creek (47.4764, – 121.8905); Griffin Creek (47.6164, – 121.9014); Lake Creek (47.5036, – 121.9035); Patterson Creek (47.6276, – 121.9855); Raging River (47.4795, – 121.8691); Snoqualmie River (47.5415, – 121.8362); Tokul Creek (47.5563, – 121.8285).

(ii) *Lower Snoqualmie River Watershed 1711001004*. Outlet(s) = Snoqualmie River (Lat 47.8303, Long – 122.0451) upstream to endpoint(s) in: Cherry Creek (47.7465, – 121.8953); Margaret Creek (47.7547, – 121.8933); North Fork Tolt River (47.7060, – 121.7957); Snoqualmie River (47.6407, – 121.9261); South Fork Tolt River (47.6926, – 121.6895); Tuck Creek (47.7442, – 122.0032); Unnamed (47.6806, – 121.9730); Unnamed (47.6822, – 121.9770); Unnamed (47.7420, – 122.0084); Unnamed (47.7522, – 121.9745); Unnamed (47.7581, – 121.9586).

(8) Unit 9. Snohomish Subbasin 17110011—(i) *Pilchuck River Watershed 1711001101*. Outlet(s) = Pilchuck River (Lat 47.9013, Long – 122.0917) upstream to endpoint(s) in: Pilchuck River (48.0052, – 121.7718).

(ii) *Snohomish River Watershed 1711001102*. Outlet(s) = Quilceda Creek (Lat 48.0556, Long – 122.1908); Skykomish River (48.0173, – 122.1877); Steamboat Slough (48.0365, – 122.1814); Union Slough (48.0299, – 122.1794); Unnamed (48.0412, – 122.1723) upstream to endpoint(s) in: Allen Creek (48.0767, – 122.1404); Quilceda Creek (48.1124, – 122.1540); Skykomish River (47.8303, – 122.0451); Unnamed (47.9545, – 122.1969); Unnamed (47.9777, – 122.1632); Unnamed (48.0019, – 122.1283); Unnamed (48.0055, – 122.1303); Unnamed (48.1330, – 122.1472).

(9) Unit 10. Lake Washington Subbasin 17110012—(i) *Cedar River Watershed 1711001201*. Outlet(s) = Cedar River (Lat 47.5003, Long – 122.2146) upstream to endpoint(s) in: Cedar River (47.3761, – 121.9603); Rock Creek (47.3673, – 122.0132); Unnamed (47.4092, – 122.0358); Webster Creek (47.3857, – 121.9845).

(ii) *Lake Washington Watershed 1711001203*. Outlet(s) = Lake Washington (Lat 47.6654, Long – 122.3960) upstream to endpoint(s) in:

Cedar River (47.5003, – 122.2146); Johns Creek (47.5048, – 122.1976); Kennydale Creek (47.5167, – 122.2074); May Creek (47.5199, – 122.1721); Taylor Creek (47.5124, – 122.2457).

(10) Unit 11. Duwamish Subbasin 17110013—(i) *Upper Green River Watershed 1711001301*. Outlet(s) = Green River (Lat 47.2234, Long – 121.6081) upstream to endpoint(s) in: Friday Creek (47.2204, – 121.4559); Intake Creek (47.2058, – 121.4049); McCain Creek (47.2093, – 121.5292); Sawmill Creek (47.2086, – 121.4675); Smay Creek (47.2508, – 121.5872); Snow Creek (47.2607, – 121.4046); Sunday Creek (47.2587, – 121.3659); Tacoma Creek (47.1875, – 121.3630); Unnamed (47.2129, – 121.4579).

(ii) *Middle Green River Watershed 1711001302*. Outlet(s) = Green River (Lat 47.2911, Long – 121.9714) upstream to endpoint(s) in: Bear Creek (47.2774, – 121.7990); Cougar Creek (47.2439, – 121.6442); Eagle Creek (47.3051, – 121.7219); Gale Creek (47.2644, – 121.7085); Green River (47.2234, – 121.6081); Piling Creek (47.2820, – 121.7553); Sylvester Creek (47.2457, – 121.6537); Unnamed (47.2360, – 121.6333).

(iii) *Lower Green River Watershed 1711001303*. Outlet(s) = Duwamish River (Lat 47.5113, Long – 122.2951) upstream to endpoint(s) in: Big Soos Creek (47.4191, – 122.1599); Burns Creek (47.2779, – 122.1087); Covington Creek (47.3341, – 122.0399); Crisp Creek (47.2897, – 122.0590); Green River (47.2911, – 121.9714); Jenkins Creek (47.3791, – 122.0899); Little Soos Creek (47.4031, – 122.1235); Mill Creek (47.3263, – 122.2455); Newaukum Creek (47.2303, – 121.9518); Unnamed (47.2765, – 121.9730); Unnamed (47.2891, – 122.1557); Unnamed (47.3007, – 122.1774); Unnamed (47.3250, – 122.1961); Unnamed (47.3464, – 122.2397); Unnamed (47.3751, – 122.2648); Unnamed (47.4046, – 122.2134); Unnamed (47.4525, – 122.2354); Unnamed (47.4618, – 122.2315); Unnamed (47.4619, – 122.2554); Unnamed (47.4876, – 122.2781).

(11) Unit 12. Puyallup Subbasin 17110014—(i) *Upper White River Watershed 1711001401*. Outlet(s) = White River (Lat 47.1588, Long – 121.6587) upstream to endpoint(s) in: Greenwater River (47.1204, – 121.5055); Huckleberry Creek (47.0612, – 121.6033); Pinochle Creek (47.0478, – 121.7043); Unnamed (46.9935, – 121.5295); West Fork White River (47.0483, – 121.6916); Wrong Creek (47.0403, – 121.6999).

(ii) *Lower White River Watershed 1711001402*. Outlet(s) = White River

(Lat 47.2001, Long – 122.2579) upstream to endpoint(s) in: Boise Creek (47.1958, – 121.9467); Camp Creek (47.1430, – 121.7012); Clearwater River (47.0852, – 121.7823); Unnamed (47.1509, – 121.7236); Unnamed (47.2247, – 122.1072); Unnamed (47.2307, – 122.1079); Unnamed (47.2383, – 122.2234); Unnamed (47.2498, – 122.2346); White River (47.1588, – 121.6587).

(iii) *Carbon River Watershed 1711001403*. Outlet(s) = Carbon River (Lat 47.1308, Long – 122.2315) upstream to endpoint(s) in: Carbon River (46.9965, – 121.9198); South Fork South Prairie Creek (47.1203, – 121.9963); Voight Creek (47.0751, – 122.1285); Wilkeson Creek (47.0972, – 122.0245).

(iv) *Upper Puyallup River Watershed 1711001404*. Outlet(s) = Puyallup River (Lat 47.1308, Long – 122.2315) upstream to endpoint(s) in: Deer Creek (46.8547, – 121.9680); Kapowsin Creek (46.9854, – 122.2008); Kellogg Creek (46.9164, – 122.0652); Mowich River (46.9209, – 121.9739); Rushingwater Creek (46.8971, – 121.9439); Unnamed (46.8867, – 122.0194); Unnamed (46.8899, – 121.9657).

(v) *Lower Puyallup River Watershed 1711001405*. Outlet(s) = Hylebos Creek (Lat 47.2611, Long – 122.3591); Puyallup River (47.2501, – 122.4131) upstream to endpoint(s) in: Canyonfalls Creek (47.1421, – 122.2186); Clarks Creek (47.1757, – 122.3168); Clear Creek (47.2187, – 122.3727); Fennel Creek (47.1495, – 122.1849); Puyallup River (47.1308, – 122.2315); Unnamed (47.1779, – 122.1992); Unnamed (47.1799, – 122.3066); Unnamed (47.1928, – 122.3371); Unnamed (47.2723, – 122.3216); West Hylebos Creek (47.2736, – 122.3289).

(12) Unit 13. Nisqually Subbasin 17110015—(i) *Mashel/Ohop Watershed 1711001502*. Outlet(s) = Nisqually River (Lat 46.8646, Long – 122.4776) upstream to endpoint(s) in: Little Mashel River (46.8504, – 122.2724); Lynch Creek (46.8760, – 122.2625); Mashel River (46.8431, – 122.1205); Nisqually River (46.8303, – 122.3225); Ohop Creek (46.9264, – 122.2603); Powell Creek (46.8528, – 122.4505); Tanwax Creek (46.8630, – 122.4549); Twentyfive Mile Creek (46.9274, – 122.2558).

(ii) *Lowland Watershed 1711001503*. Outlet(s) = McAllister Creek (Lat 47.1120, Long – 122.7215); Nisqually River (47.1110, – 122.7026); Unnamed (47.0071, – 122.6556); Yelm Creek (46.9712, – 122.6263) upstream to endpoint(s) in: Horn Creek (46.9042, – 122.4776); McAllister Creek (47.0299, – 122.7236); Nisqually River (46.8646,

– 122.4776); Unnamed (46.9108, – 122.5032); Unnamed (47.0001, – 122.6510); Unnamed (47.0055, – 122.6520); Yelm Creek (46.9629, – 122.6194). Excluded is that segment of the Nisqually River from Lat 47.0703, Long – 122.7017, to Lat 46.9668, Long – 122.5640.

(13) Unit 15. Skokomish Subbasin 17110017—*Skokomish River Watershed 1711001701*. Outlet(s) = Skokomish River (Lat 47.3543, Long – 123.1122); Unnamed (47.3420, – 123.1092); Unnamed (47.3471, – 123.1275); Unnamed (47.3509, – 123.1101) upstream to endpoint(s) in: Brown Creek (47.4238, – 123.3052); Fir Creek (47.3363, – 123.3016); McTaggart Creek (47.3749, – 123.2318); North Fork Skokomish River (47.5197, – 123.3329); Purdy Canyon (47.3021, – 123.1803); Unnamed (47.3048, – 123.1528); Unnamed (47.3077, – 123.2012); Unnamed (47.3146, – 123.1353); Unnamed (47.3209, – 123.2212); Unnamed (47.3222, – 123.3060); Unnamed (47.3237, – 123.1467); Unnamed (47.3250, – 123.1250); Vance Creek (47.3300, – 123.3137); Weaver Creek (47.3097, – 123.2384).

(14) Unit 16. Hood Canal Subbasin 17110018—(i) *Hamma Hamma River Watershed 1711001803*. Outlet(s) = Hamma Hamma River (Lat 47.5471, Long – 123.0440) upstream to endpoint(s) in: Hamma Hamma River (47.5590, – 123.0632); North Fork John Creek (47.5442, – 123.0696).

(ii) *Duckabush River Watershed 1711001804*. Outlet(s) = Duckabush River (Lat 47.6502, Long – 122.9348) upstream to endpoint(s) in: Duckabush River (47.6825, – 123.0675).

(iii) *Dosewallips River Watershed 1711001805*. Outlet(s) = Dosewallips River (Lat 47.6881, Long – 122.8945); Unnamed (47.6857, – 122.8967) upstream to endpoint(s) in: Dosewallips River (47.7289, – 123.1111); Rocky Brook (47.7212, – 122.9405); Unnamed (47.6886, – 122.8977).

(15) Unit 18. Dungeness/Elwha 17110020—(i) *Dungeness River Watershed 1711002003*. Outlet(s) = Dungeness River (Lat 48.1506, Long – 123.1311); Unnamed (48.1537, – 123.1267) upstream to endpoint(s) in: Dungeness River (47.9386, – 123.0885); Gray Wolf River (47.9168, – 123.2409); Matriotti Creek (48.1368, – 123.1428); Unnamed (48.1514, – 123.1216).

(ii) *Elwha River Watershed 1711002007*. Outlet(s) = Elwha River (Lat 48.1466, Long – 123.5671); Unnamed (48.1483, – 123.5599) upstream to endpoint(s) in: Elwha River (48.0927, – 123.5614).

(16) Unit 19. Nearshore Marine Areas – This unit includes all nearshore zones

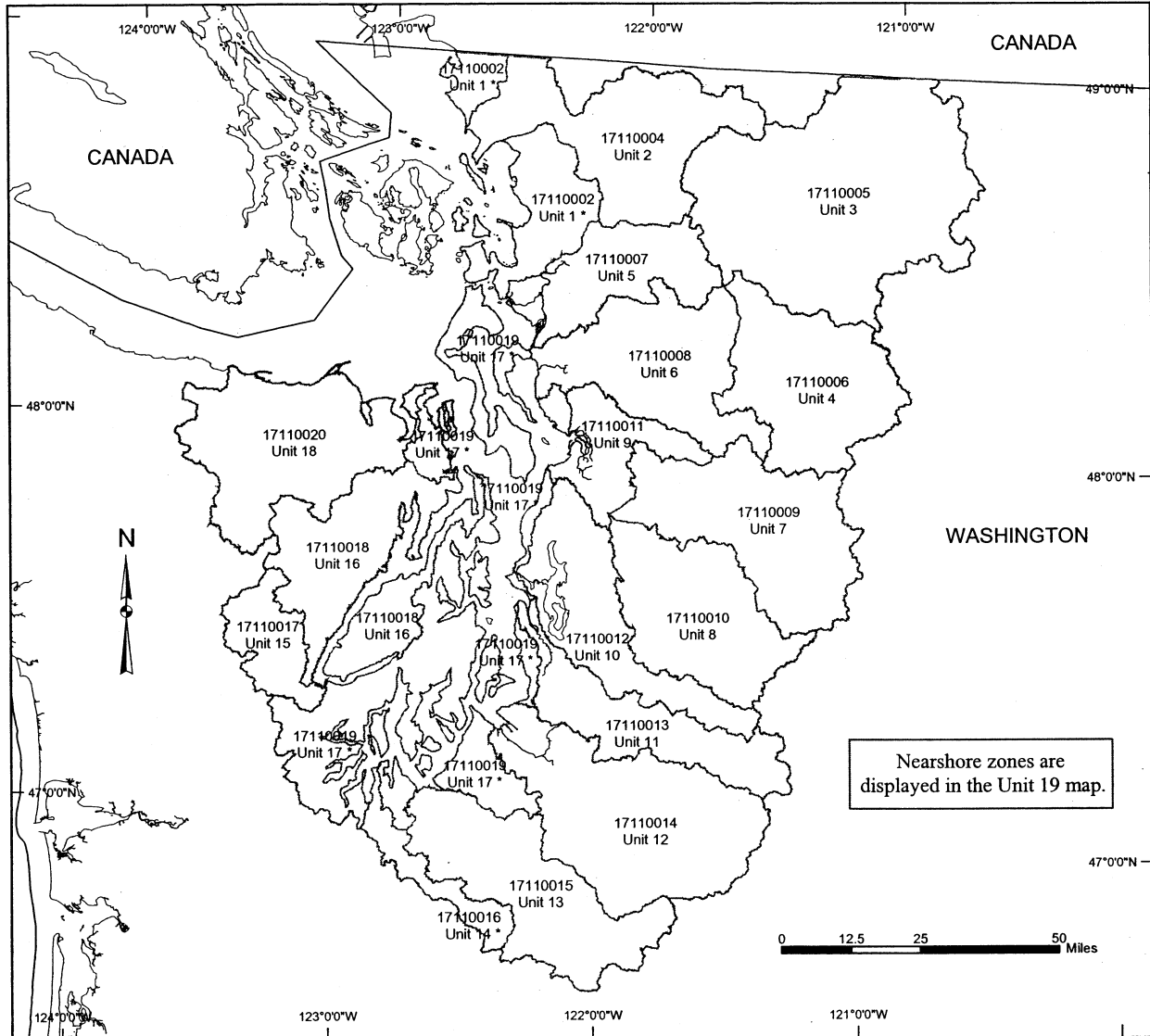
(including areas adjacent to islands) of the Strait of Georgia (south of the international border), Puget Sound, Hood Canal, and the Strait of Juan de Fuca (to the western end of the Elwha River delta) from extreme high water out to a depth of 30 meters, except for the following contiguous nearshore segments associated with Department of Defense lands and restricted marine zones: from Lat 48.3730, Long – 122.6641 to Lat 48.3154, Long – 122.7063; from Lat 48.2500, Long – 122.7571 to Lat 48.2099, Long – 122.7424; from Lat 48.1198, Long – 122.5987 to Lat 48.1072, Long – 122.5977; from Lat 48.2862, Long – 122.6311 to Lat 48.2812, Long – 122.5546; from Lat 47.9945, Long – 122.2228 to Lat 47.9877, Long – 122.2169; from Lat 47.1575, Long – 122.6149 to Lat 47.1195, Long

– 122.6629; from Lat 47.2223, Long – 122.7074 to Lat 47.2006, Long – 122.6419; from Lat 47.2185, Long – 122.6035 to Lat 47.2746, Long – 122.6566; from Lat 47.2247, Long – 122.7191 to Lat 47.2651, Long – 122.7353; from Lat 47.2816, Long – 122.6929 to Lat 47.2825, Long – 122.6522; from Lat 47.5626, Long – 122.5374 to Lat 47.5708, Long – 122.5504; from Lat 47.5480, Long – 122.6162 to Lat 47.5641, Long – 122.6224; from Lat 47.5928, Long – 122.6848 to Lat 47.5966, Long – 122.6899; from Lat 47.6531, Long – 122.6138 to Lat 47.7045, Long – 122.6222; from Lat 47.6999, Long – 122.6263 to Lat 47.6984, Long – 122.6270; from Lat 47.7723, Long – 122.7035 to Lat 47.7214, Long – 122.7454; from Lat 47.7365, Long – 122.8542 to Lat 47.7623, Long

– 122.8517; from Lat 47.7810, Long – 122.8517 to Lat 47.8001, Long – 122.8182; from Lat 47.8001, Long – 122.7873 to Lat 47.6928, Long – 122.8309; from Lat 48.0159, Long – 122.6971 to Lat 48.0190, Long – 122.6980; from Lat 48.1174, Long – 122.7508 to Lat 48.1180, Long – 122.7498; from Lat 48.1195, Long – 122.7501 to Lat 48.1426, Long – 122.7545; from Lat 48.1444, Long – 122.7547 to Lat 48.1407, Long – 122.7945; and waters immediately west of Smith Island and less than 30 m depth within a circular area having a radius of 2.32 km and centered at Lat 48.3169, Long – 122.9003.

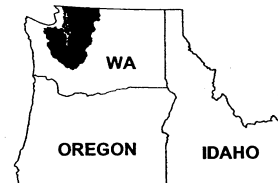
(17) Maps of proposed critical habitat for the Puget Sound chinook salmon ESU follow:

**BILLING CODE 3510-22-P**

**Map of the Puget Sound Chinook Salmon ESU****Legend**

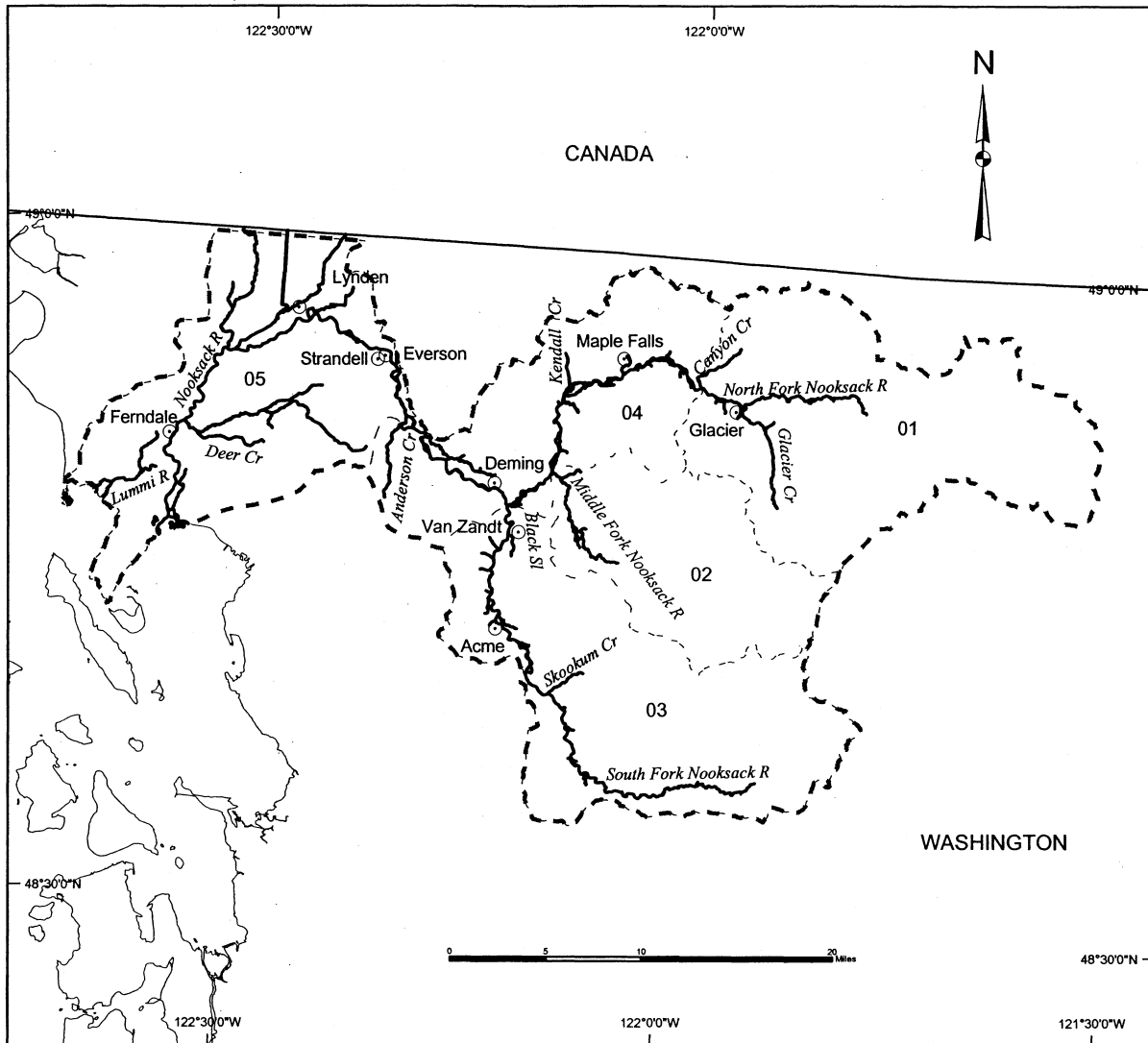
- State Boundaries
- Subbasin Boundaries

\* All habitat areas in unit are proposed for exclusion

**Area of Detail**

# Proposed Critical Habitat for the Puget Sound Chinook ESU

**NOOKSACK SUBBASIN**  
**17110004, Unit 2**

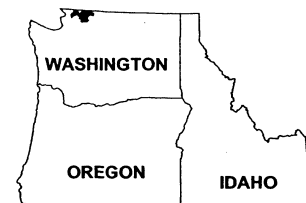


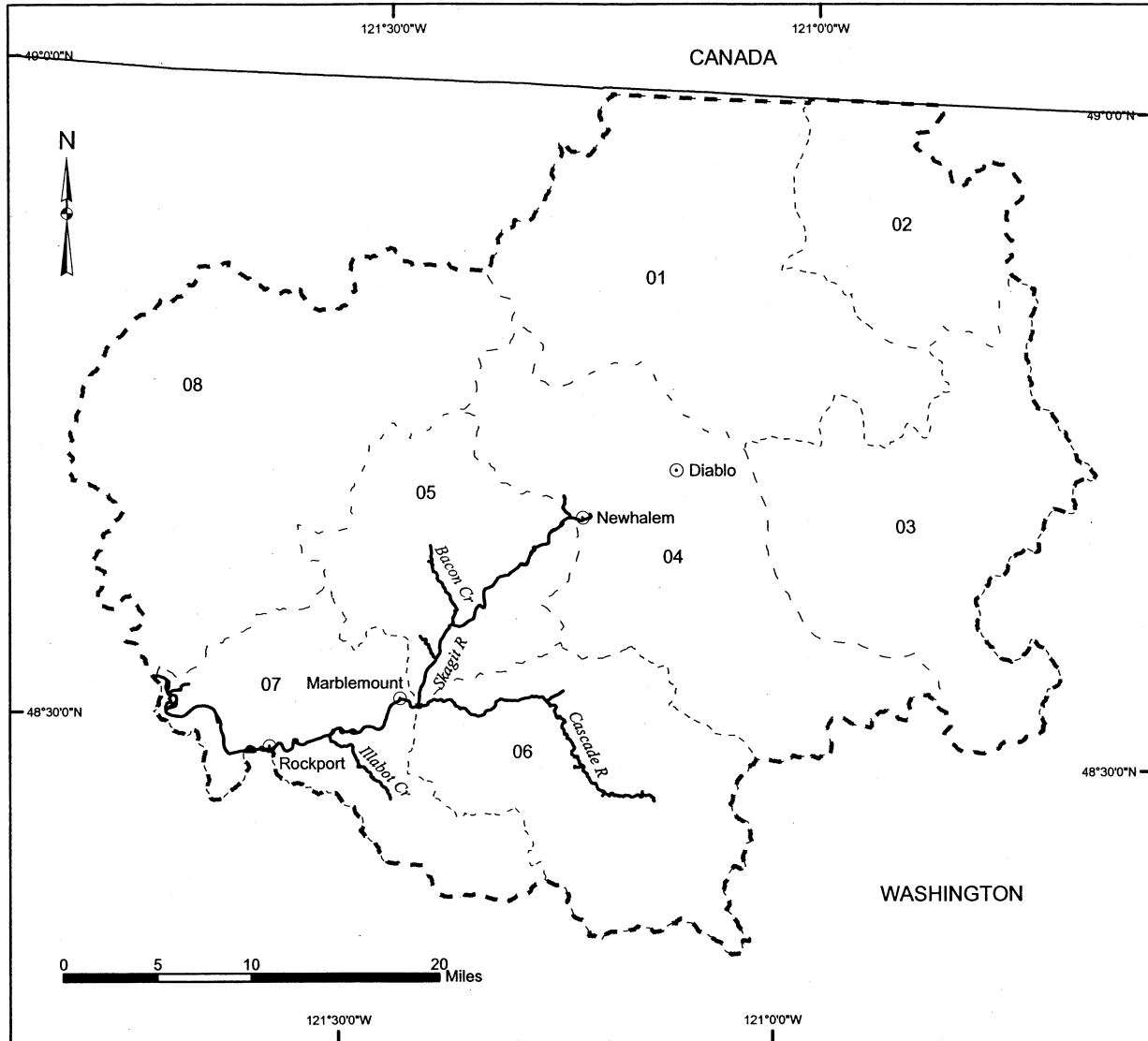
## Legend

- Cities / Towns
- State Boundary
- ~ Shoreline
- ~ Proposed Critical Habitat
- - - Subbasin Boundary
- - - Watershed Boundaries

01 - 05 = Watershed code - last 2 digits of 17110004xx

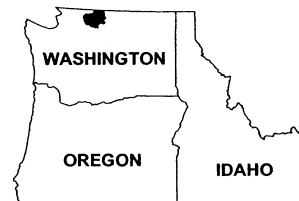
## Area of Detail

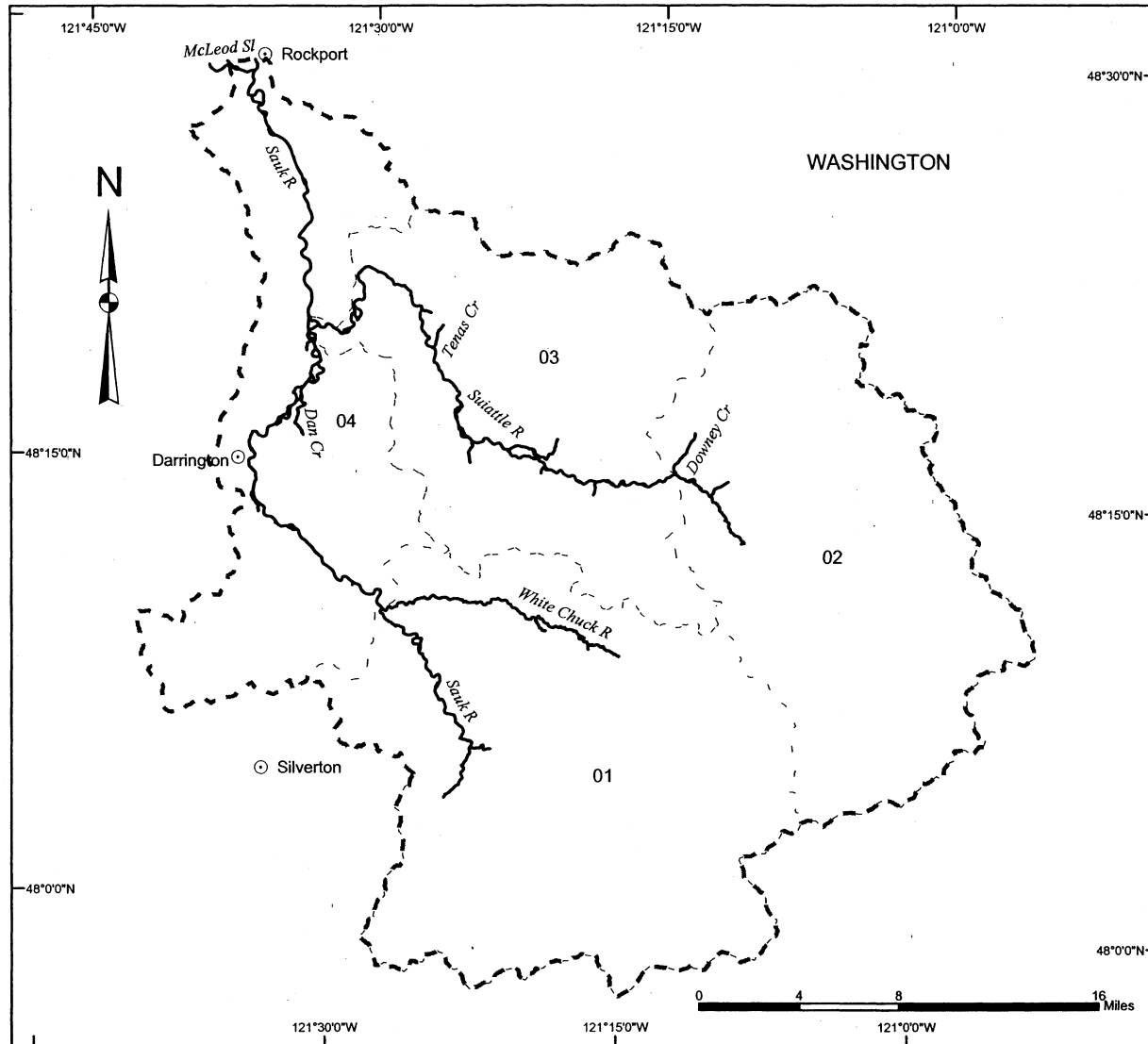


**Proposed Critical Habitat for the  
Puget Sound Chinook ESU****UPPER SKAGIT SUBBASIN  
17110005, Unit 3****Legend**

- Cities / Towns
- State Boundary
- ~ Proposed Critical Habitat
- - - Subbasin Boundary
- - - Watershed Boundaries

01 - 08 = Watershed code - last 2 digits of 17110005xx

**Area of Detail**

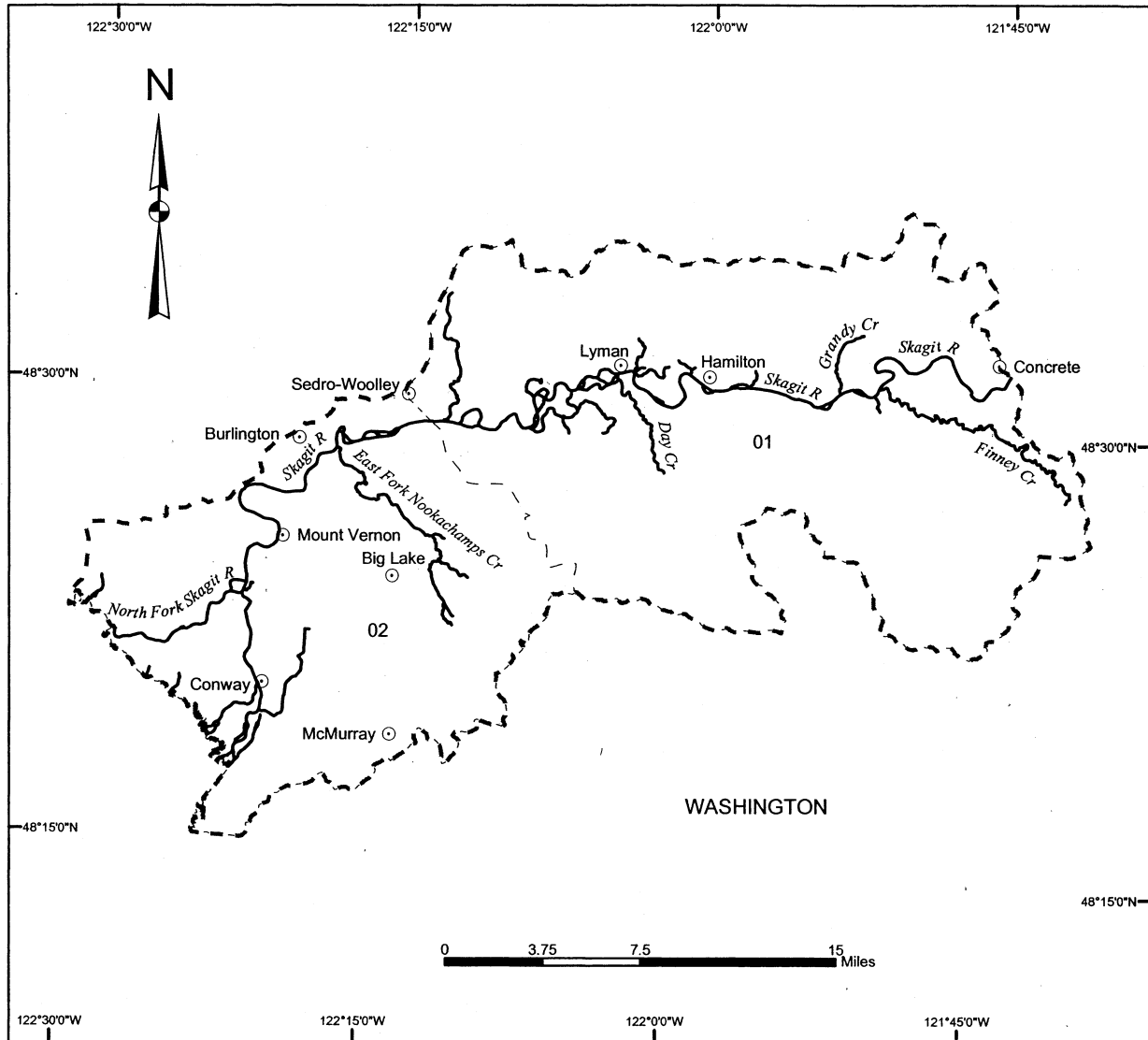
**Proposed Critical Habitat for the  
Puget Sound Chinook ESU****SAUK SUBBASIN  
17110006, Unit 4****Legend**

- Cities / Towns
- ~~~~~ Proposed Critical Habitat
- - - Subbasin Boundary
- ..... Watershed Boundaries

01 - 04 = Watershed code - last 2 digits of 17110006xx

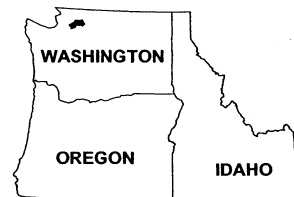
**Area of Detail**

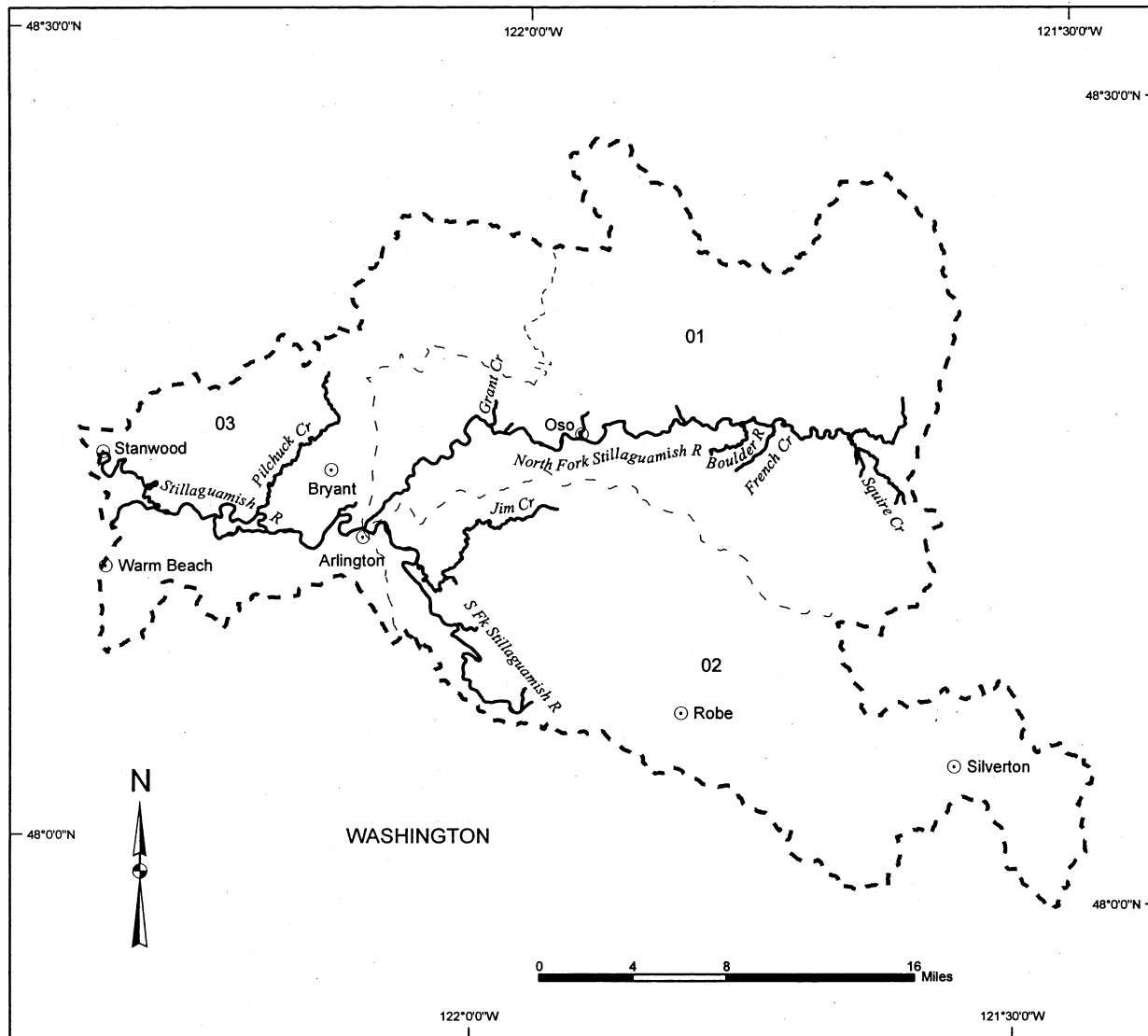


**Proposed Critical Habitat for the  
Puget Sound Chinook ESU****LOWER SKAGIT SUBBASIN  
17110007, Unit 5****Legend**

- Cities / Towns
- ~ Proposed Critical Habitat
- - - Subbasin Boundary
- - - Watershed Boundaries

01 - 02 = Watershed code - last 2 digits of 17110007xx

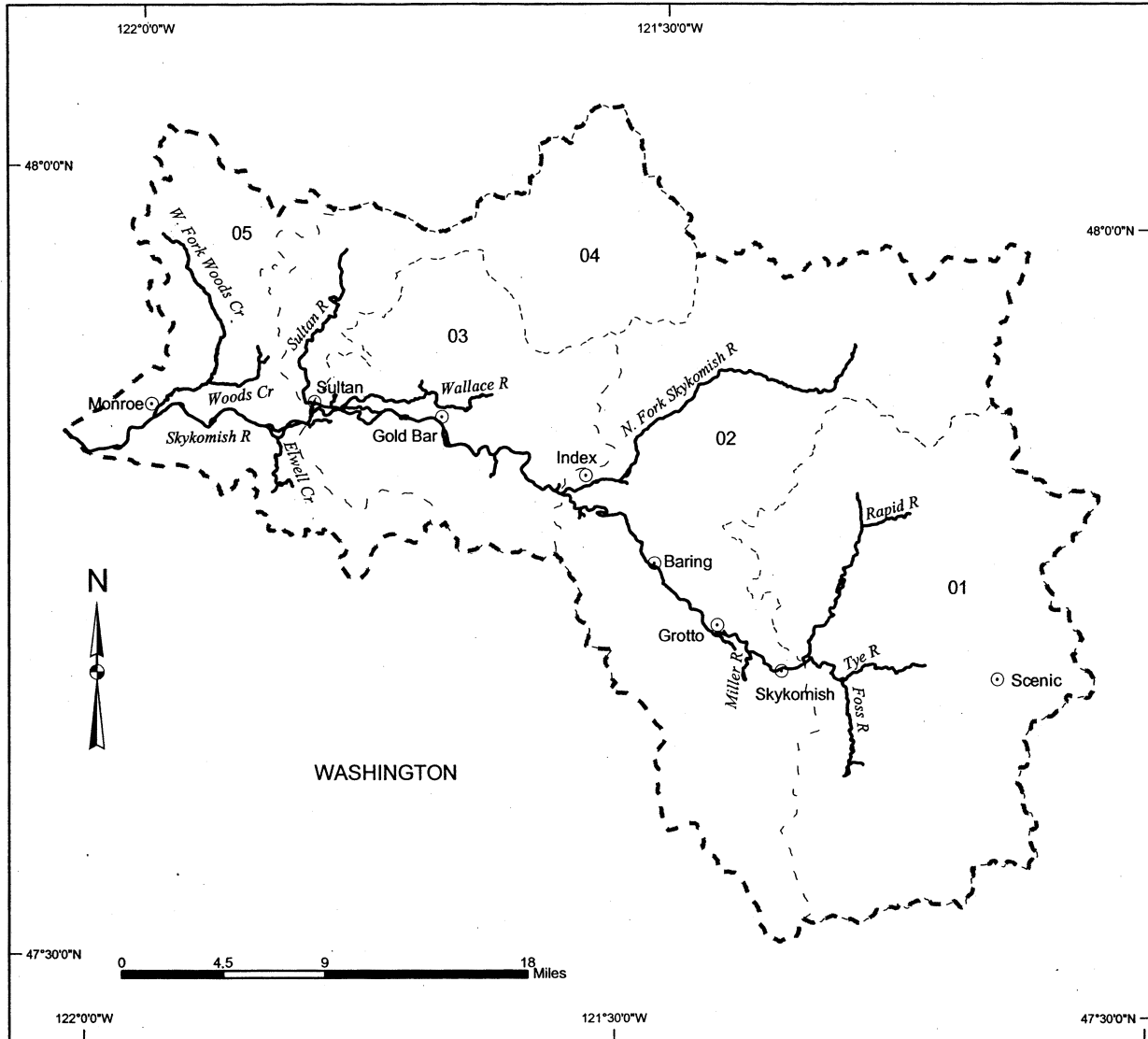
**Area of Detail**

**Proposed Critical Habitat for the  
Puget Sound Chinook ESU****STILLAGUAMISH SUBBASIN  
17110008, Unit 6****Legend**

- Cities / Towns
- ~~~~~ Proposed Critical Habitat
- - - Subbasin Boundary
- ..... Watershed Boundaries

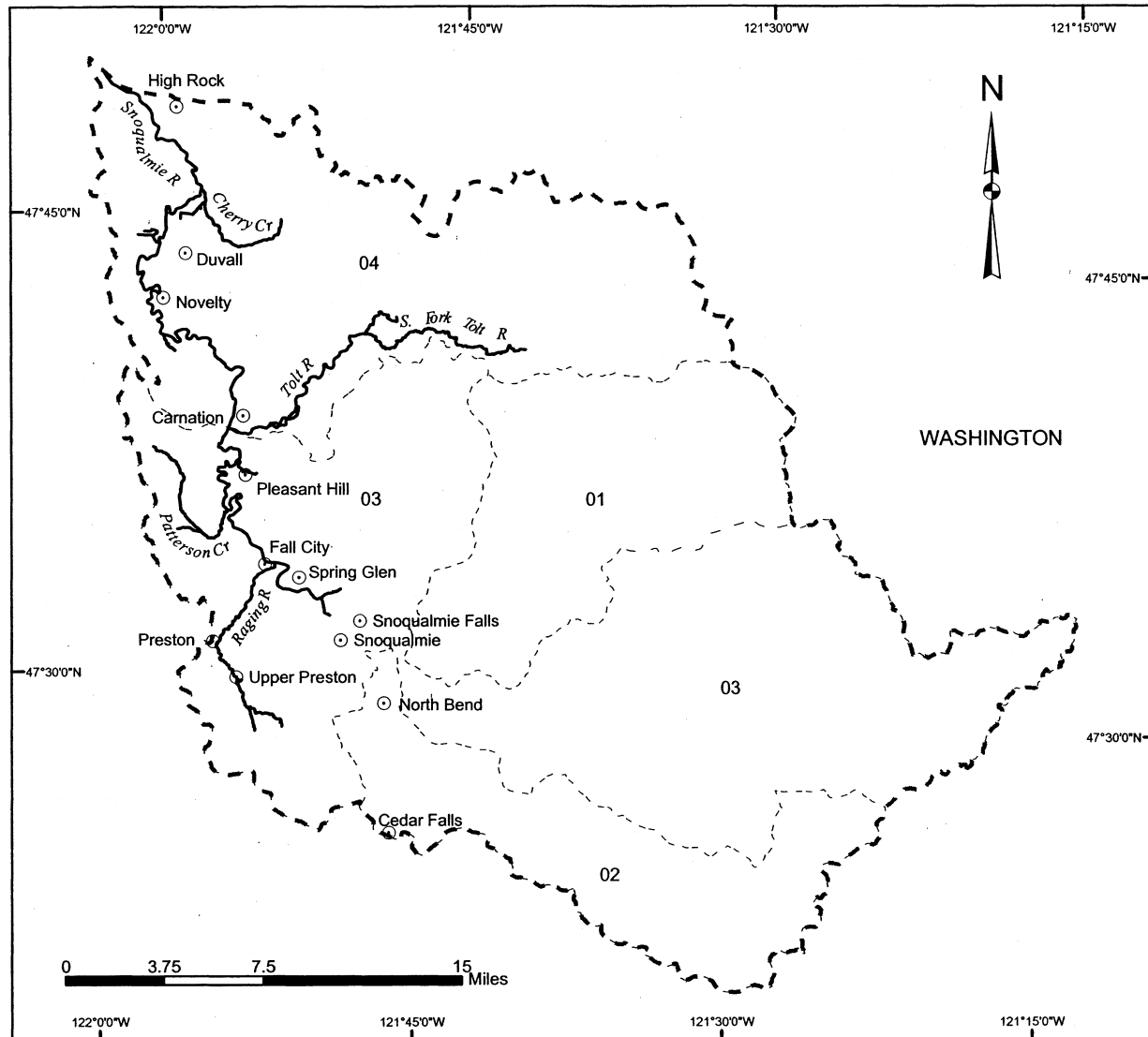
01 - 03 = Watershed code - last 2 digits of 17110008xx

**Area of Detail**

**Proposed Critical Habitat for the  
Puget Sound Chinook ESU****SKYKOMISH SUBBASIN  
17110009, Unit 7****Legend**

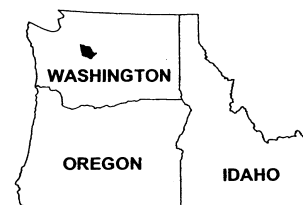
- Cities / Towns
  - ~~~~~ Proposed Critical Habitat
  - - - Subbasin Boundary
  - ..... Watershed Boundaries
- 01 - 05 = Watershed code - last 2 digits of 17110009xx

**Area of Detail**

**Proposed Critical Habitat for the  
Puget Sound Chinook ESU****SNOQUALMIE SUBBASIN  
17110010, Unit 8****Legend**

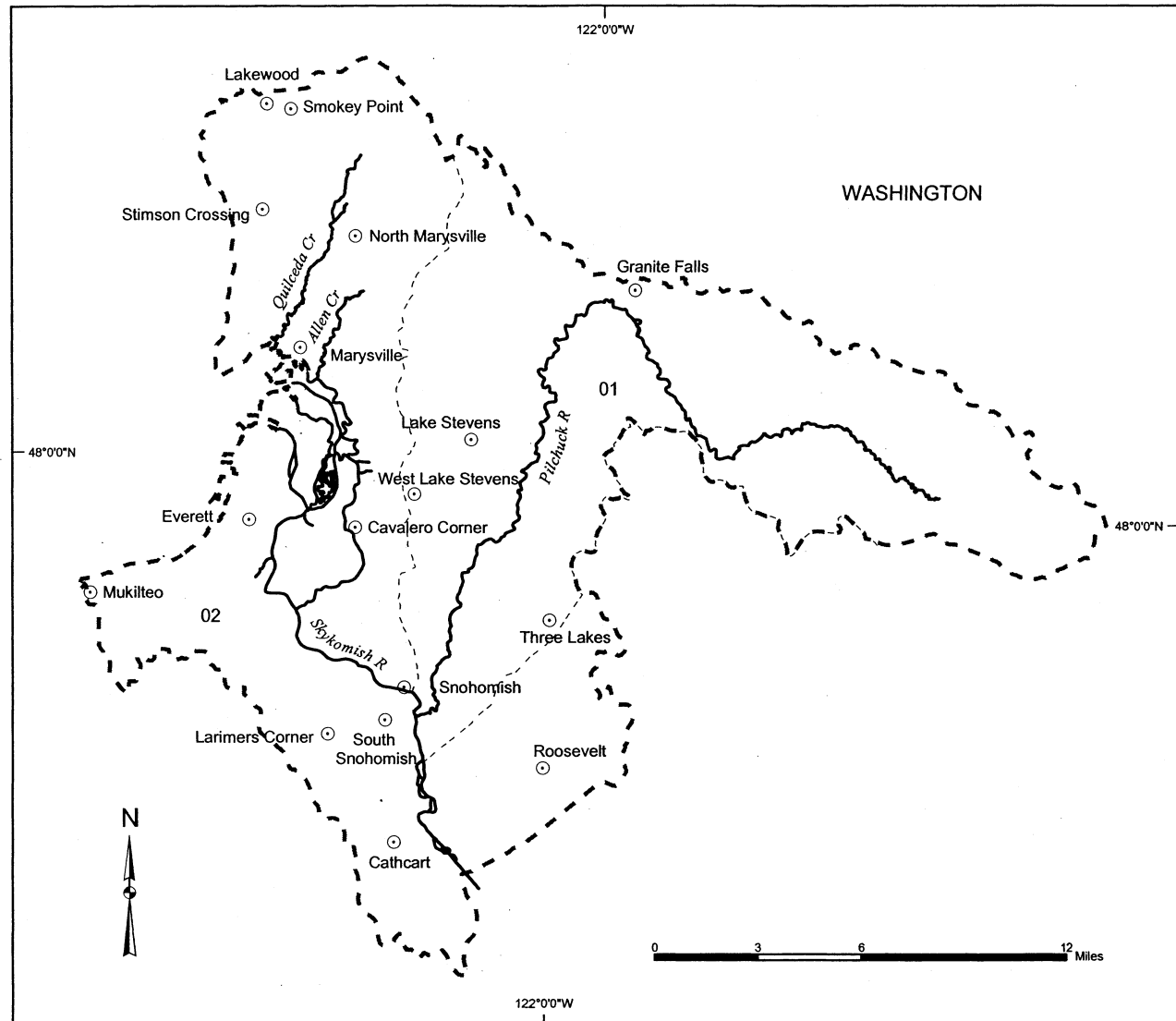
- Cities / Towns
- ~ Proposed Critical Habitat
- - - Subbasin Boundary
- - - Watershed Boundaries

01 - 04 = Watershed code - last 2 digits of 17110010xx

**Area of Detail**

# Proposed Critical Habitat for the Puget Sound Chinook ESU

**SNOHOMISH SUBBASIN  
17110011, Unit 9**

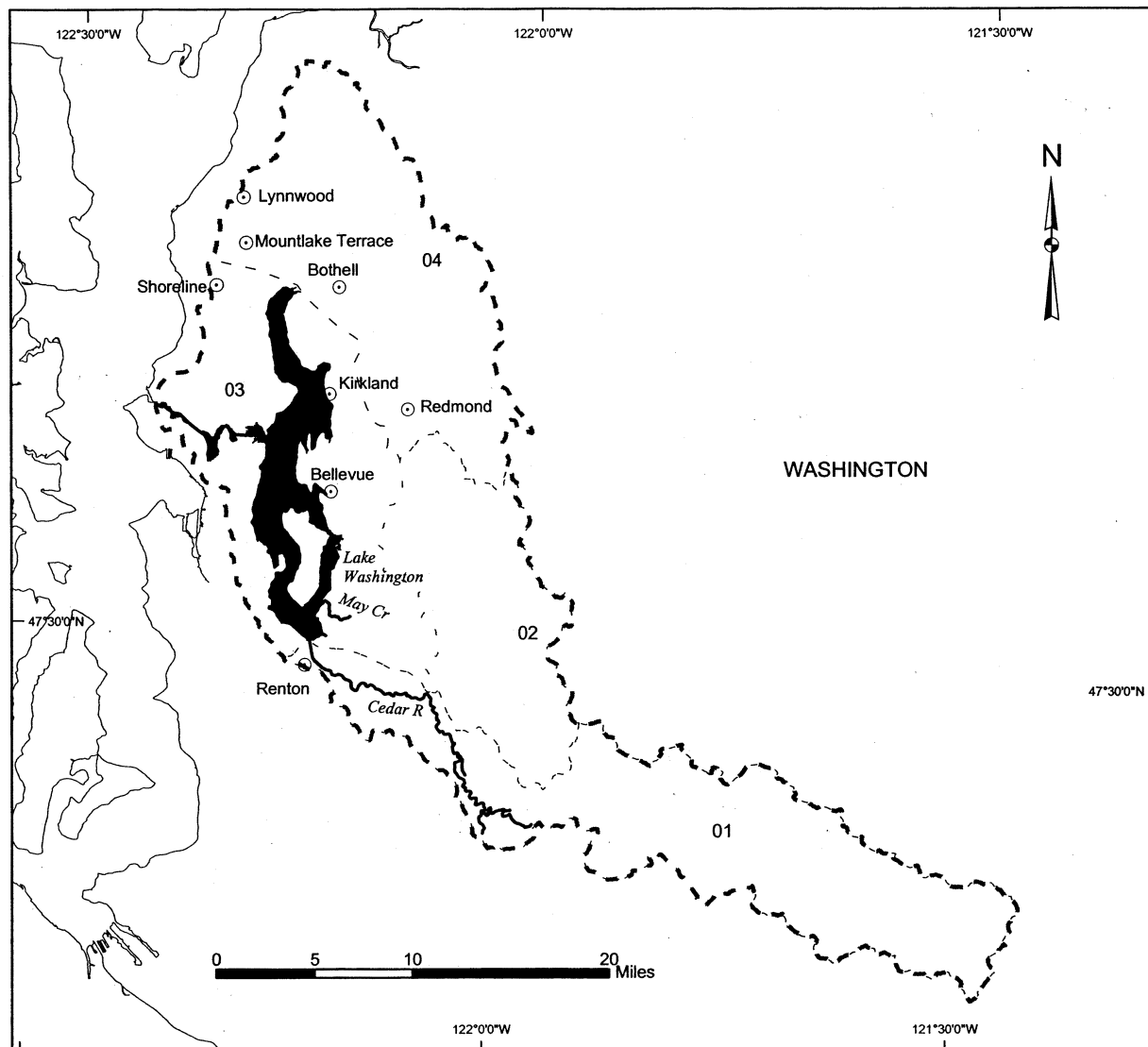


## Legend

- Cities / Towns
  - ~~~~~ Proposed Critical Habitat
  - - - Subbasin Boundary
  - - - Watershed Boundaries
- 01 - 02 = Watershed code - last 2 digits of 17110011xx

## Area of Detail

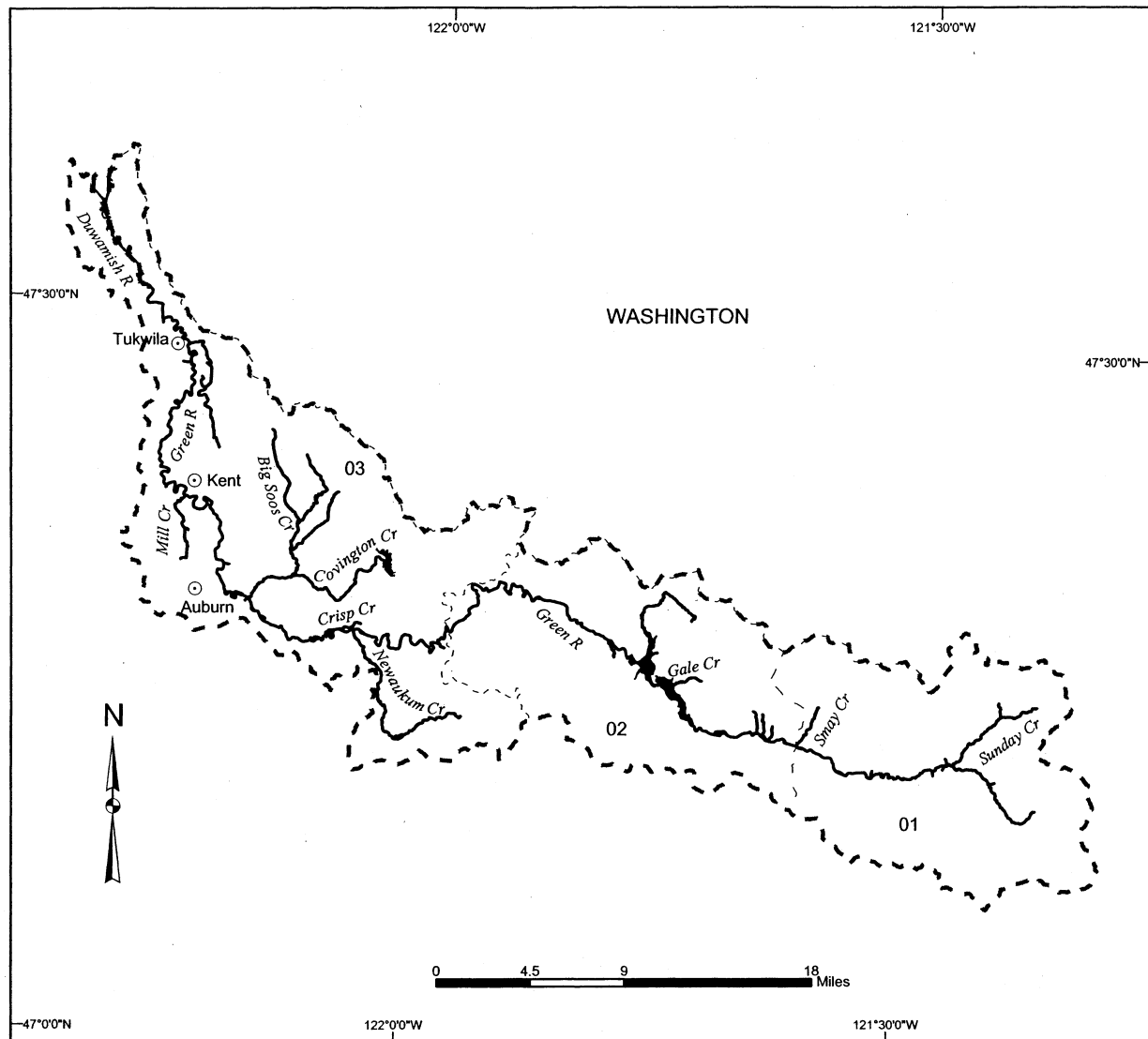


**Proposed Critical Habitat for the  
Puget Sound Chinook ESU****LAKE WASHINGTON SUBBASIN  
17110012, Unit 10****Legend**

- Cities / Towns
- ~ Shoreline
- ~ Proposed Critical Habitat
- Water Bodies
- - - Subbasin Boundary
- - - Watershed Boundaries

01 - 04 = Watershed code - last 2 digits of 17110012xx

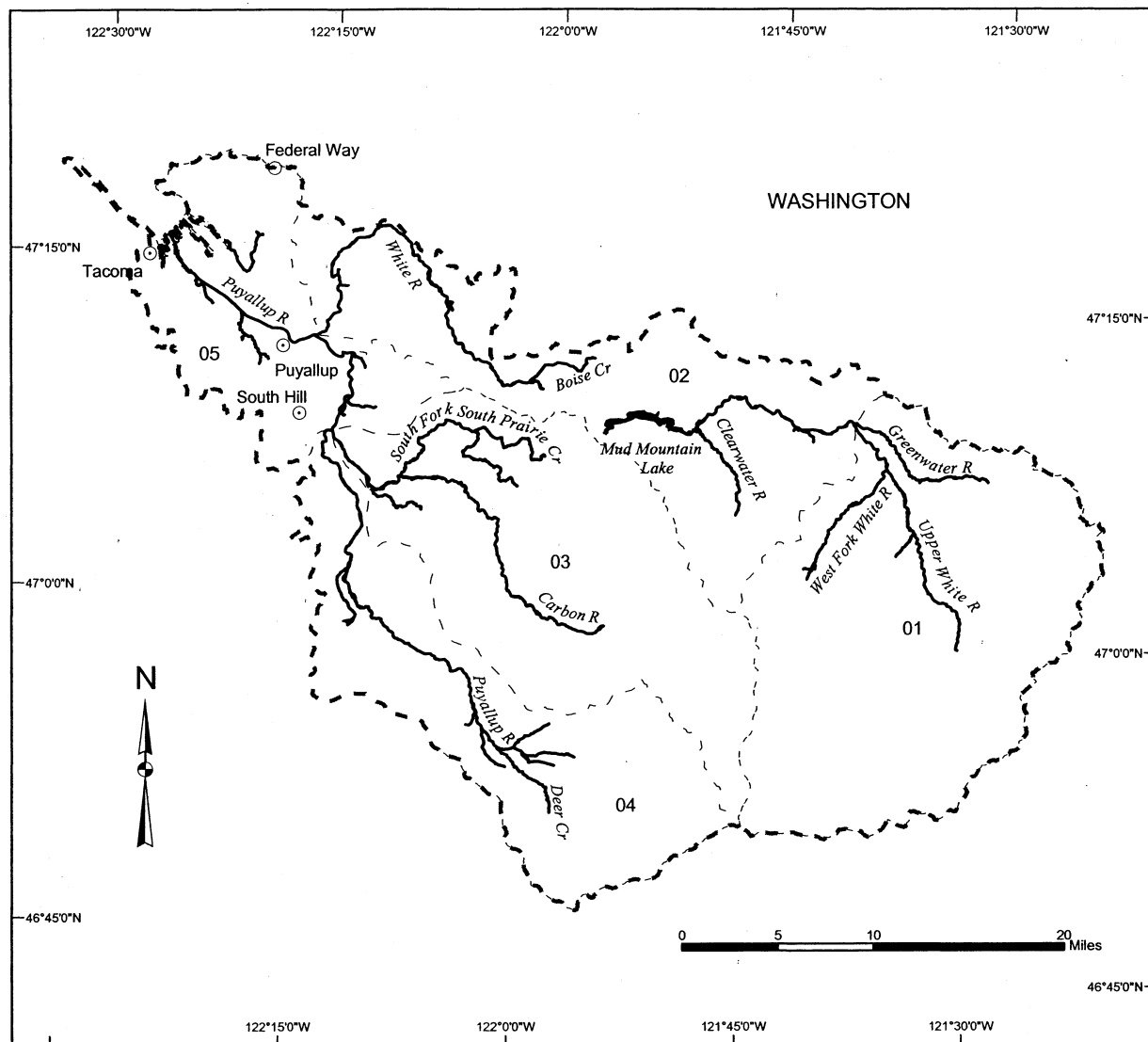
**Area of Detail**

**Proposed Critical Habitat for the  
Puget Sound Chinook ESU****DUWAMISH SUBBASIN  
17110013, Unit 11****Legend**

- Cities / Towns
- ~ Proposed Critical Habitat
- Water Bodies
- - - Subbasin Boundary
- - - Watershed Boundaries
- 01 - 03 = Watershed code - last 2 digits of 17110013xx

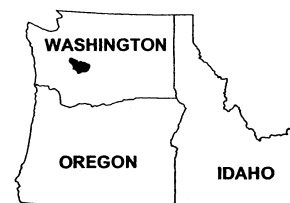
**Area of Detail**

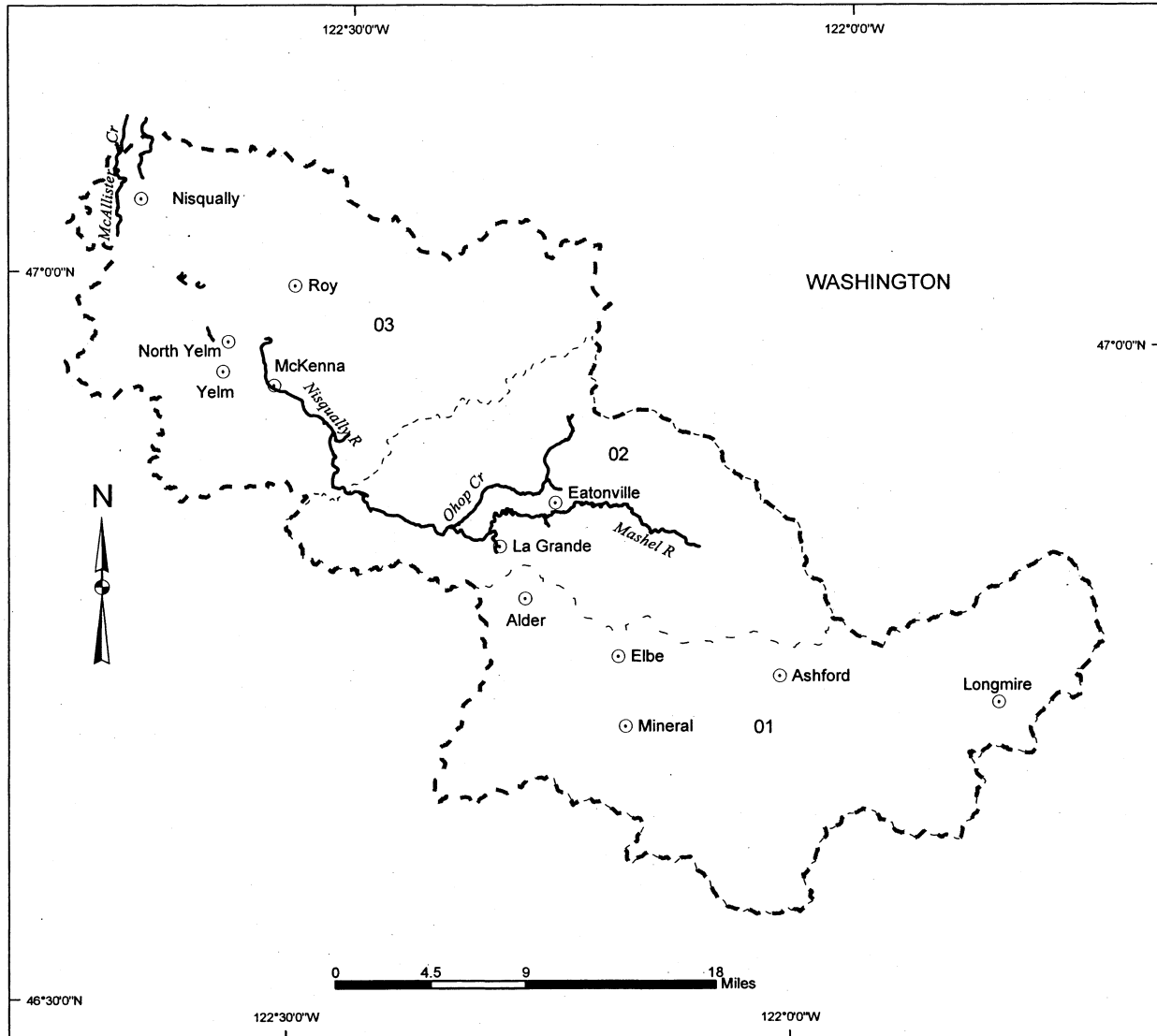


**Proposed Critical Habitat for the  
Puget Sound Chinook ESU****PUYALLUP SUBBASIN  
17110014, Unit 12****Legend**

- Cities / Towns
- ~ Proposed Critical Habitat
- - - Subbasin Boundary
- · · Watershed Boundaries

01 - 05 = Watershed code - last 2 digits of 17110014xx

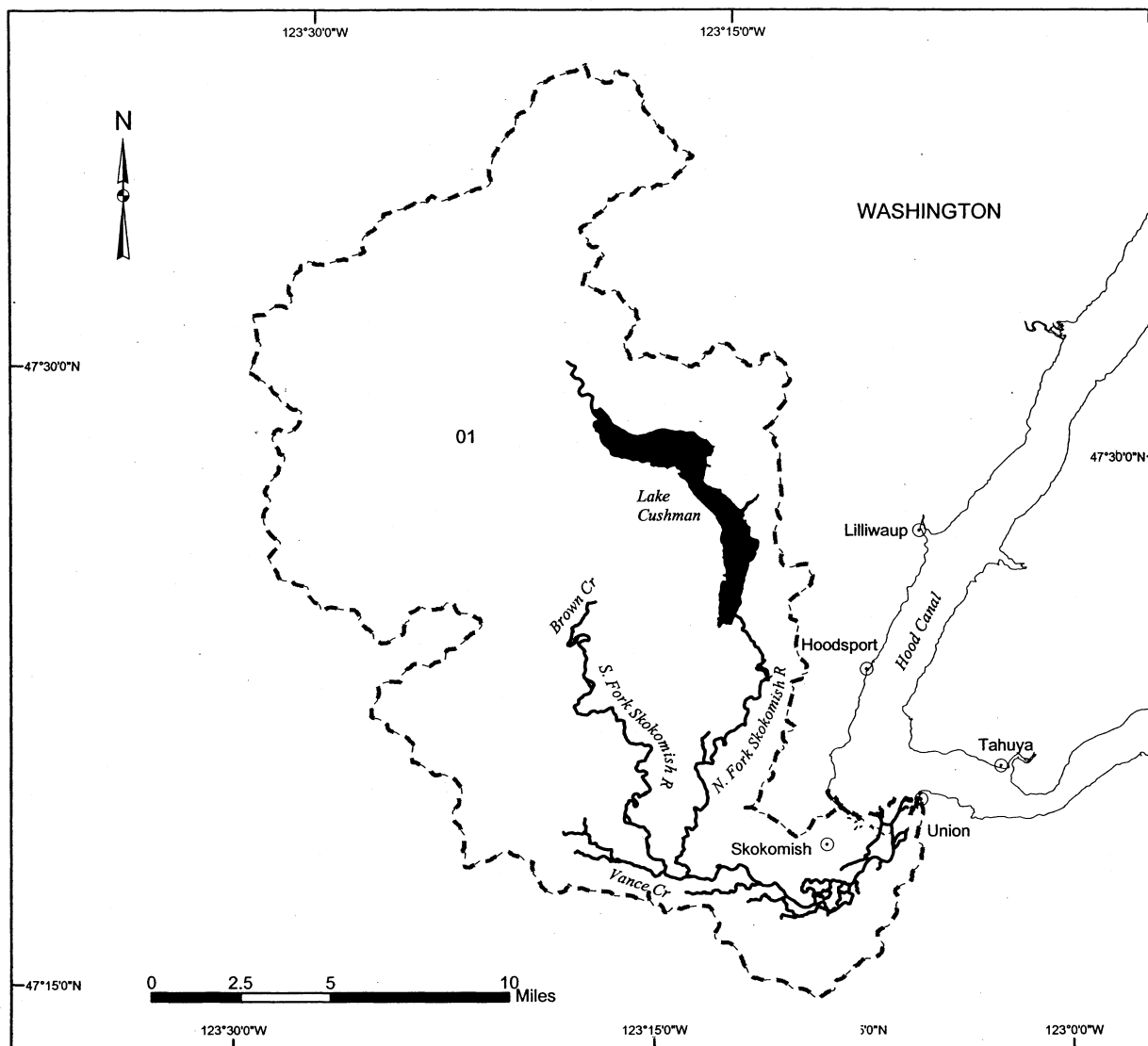
**Area of Detail**

**Proposed Critical Habitat for the  
Puget Sound Chinook ESU****NISQUALLY SUBBASIN  
17110015, Unit 13****Legend**

- Cities / Towns
- Proposed Critical Habitat
- - - Subbasin Boundary
- - - Watershed Boundaries

01 - 03 = Watershed code - last 2 digits of 17110015xx

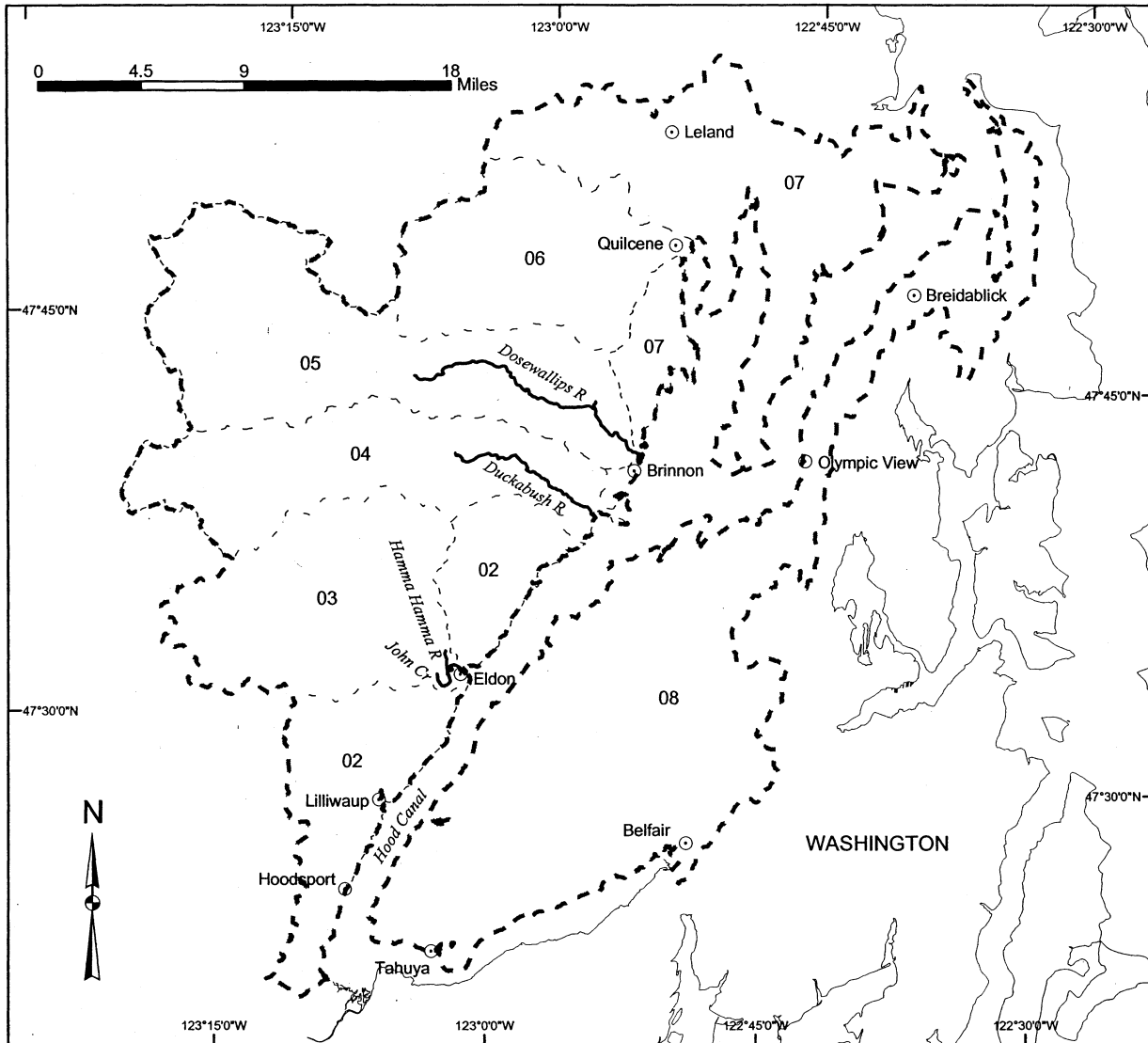
**Area of Detail**

**Proposed Critical Habitat for the  
Puget Sound Chinook ESU****SKOKOMISH SUBBASIN  
17110017, Unit 15****Legend**

- Cities / Towns
- ~~~~~ Shoreline
- ~~~~~ Proposed Critical Habitat
- Water Bodies
- - - Subbasin Boundary
- ..... Watershed Boundaries

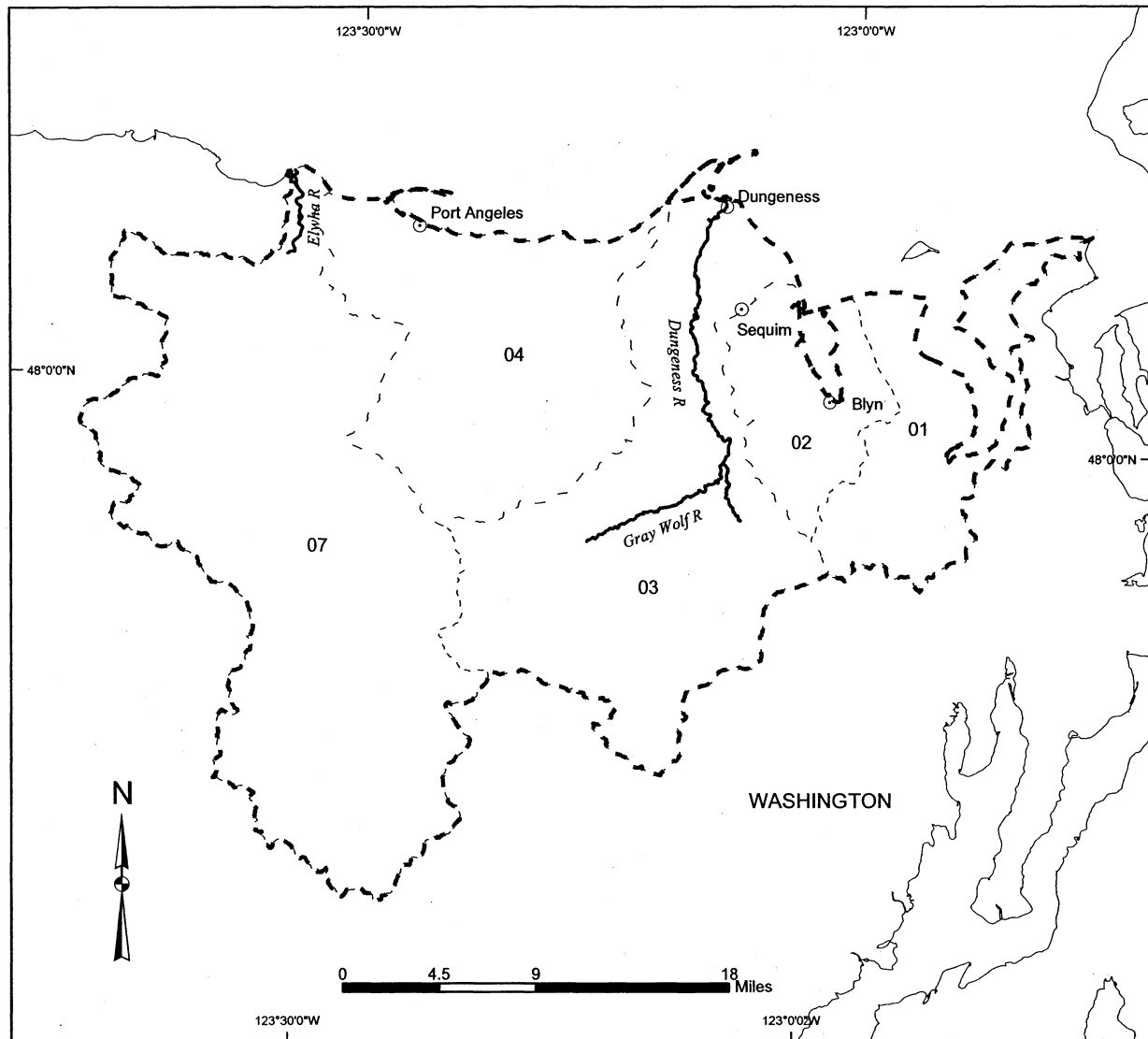
01 = Watershed code - last 2 digits of 17110017xx

**Area of Detail**

**Proposed Critical Habitat for the  
Puget Sound Chinook ESU****HOOD CANAL SUBBASIN  
17110018, Unit 16****Legend**

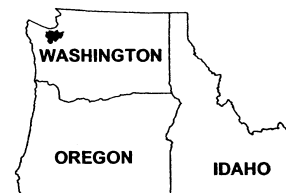
- Cities / Towns
  - ~~~~~ Shoreline
  - Proposed Critical Habitat
  - - - - Subbasin Boundary
  - Watershed Boundaries
- 02 - 08 = Watershed code - last 2 digits of 17110018xx

**Area of Detail**

**Proposed Critical Habitat for the  
Puget Sound Chinook ESU****DUNGENESS / ELWHA SUBBASIN  
17110020, Unit 18****Legend**

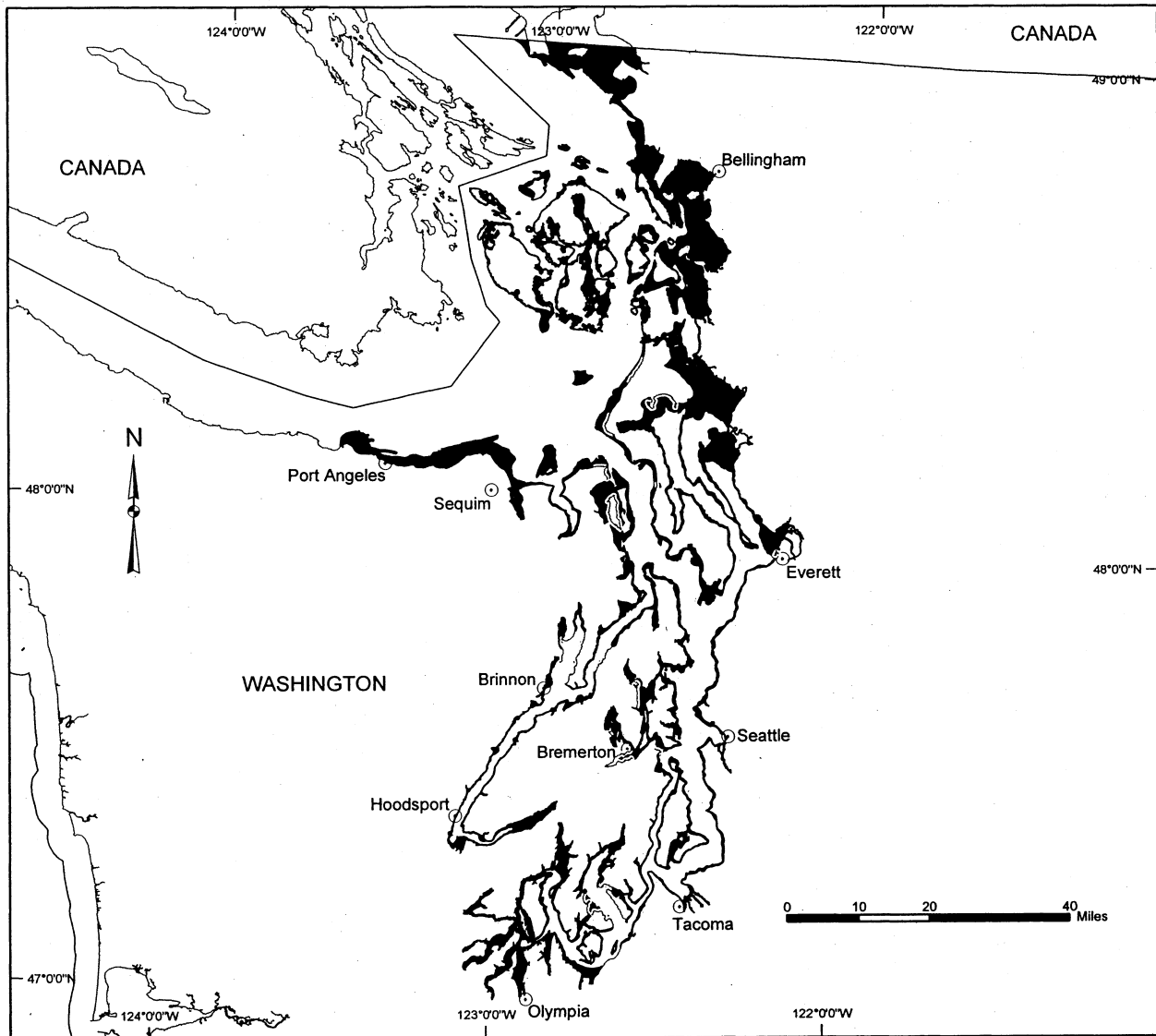
- Cities / Towns
- ~~~~ Shorelines
- ~~~~~ Proposed Critical Habitat
- - - Subbasin Boundary
- · · Watershed Boundaries

01 - 04, 07 = Watershed code - last 2 digits of 17110020xx

**Area of Detail**

# Proposed Critical Habitat for the Puget Sound Chinook ESU

## Nearshore Marine Areas Unit 19



### Legend

- ⊙ Cities / Towns
- ~~~~~ Shoreline
- State Boundary
- Nearshore Marine Areas

### Area of Detail



(1) Unit 1. Middle Columbia/Hood Subbasin 17070105—(i) *East Fork Hood River Watershed 1707010506*. Outlet(s) = Hood River (Lat 45.6050, Long -121.6323) upstream to endpoint(s) in: Dog River (45.4655, -121.5656); East Fork Hood River (45.4665, -121.5669); Pinnacle Creek (45.4595, -121.6568); Tony Creek (45.5435, -121.6411).

(ii) *West Fork Hood River Watershed 1707010507*. Outlet(s) = West Fork Hood River (Lat 45.6050, Long -121.6323) upstream to endpoint(s) in: Divers Creek (45.5457, -121.7447); Elk Creek (45.4277, -121.7889); Indian Creek (45.5375, -121.7857); Jones Creek (45.4629, -121.7942); Lake Branch (45.5083, -121.8485); McGee Creek (45.4179, -121.7675); No Name Creek (45.5347, -121.7929); Red Hill Creek (45.4720, -121.7705); Unnamed (45.5502, -121.7014).

(iii) *Hood River Watershed 1707010508*. Outlet(s) = Hood River (Lat 45.7205, Long -121.5055) upstream to endpoint(s) in: Hood River (45.6050, -121.6323).

(iv) *White Salmon River Watershed 1707010509*. Outlet(s) = White Salmon River (Lat 45.7226, Long -121.5214) upstream to endpoint(s) in: White Salmon River (45.7677, -121.5374).

(v) *Wind River Watershed 1707010511*. Outlet(s) = Wind River (Lat 45.7037, Long -121.7946) upstream to endpoint(s) in: Bear Creek (45.7620, -121.8293); Big Hollow Creek (45.9399, -121.9996); Dry Creek (45.9296, -121.9721); Falls Creek (45.9105, -121.9222); Little Wind River (45.7392, -121.7772); Ninemile Creek (45.8929, -121.9526); Paradise Creek (45.9527, -121.9408); Trapper Creek (45.8887, -122.0065); Trout Creek (45.8021, -121.9313); Wind River (45.9732, -121.9031).

(vi) *Middle Columbia/Grays Creek Watershed 1707010512*. Outlet(s) = Columbia River (Lat 45.7044, Long -121.7980) upstream to endpoint(s) in: Columbia River (45.7205, -121.5056); Dog Creek (45.7200, -121.6804); Gorton Creek (45.6912, -121.7721); Lindsey Creek (45.6868, -121.7153); Unnamed (45.7022, -121.7435).

(vii) *Middle Columbia/Eagle Creek Watershed 1707010513*. Outlet(s) = Columbia River (Lat 45.6447, Long -121.9395) upstream to endpoint(s) in: Columbia River (45.7044, -121.7980); Eagle Creek (45.6365, -121.9171); Herman Creek (45.6749, -121.8477); Rock Creek (45.6958, -121.8915).

(2) Unit 2. Lower Columbia/Sandy Subbasin 17080001—(i) *Salmon River Watershed 1708000101*. Outlet(s) = Salmon River (Lat 45.3768, Long -122.0293) upstream to endpoint(s) in:

Cheaney Creek (45.3104, -121.9561); Copper Creek (45.2508, -121.9053); Salmon River (45.2511, -121.9025); South Fork Salmon River (45.2606, -121.9474); Unnamed (45.3434, -121.9920).

(ii) *Zigzag River Watershed 1708000102*. Outlet(s) = Zigzag River (Lat 45.3489, Long -121.9442) upstream to endpoint(s) in: Henry Creek (45.3328, -121.9110); Still Creek (45.2755, -121.8413); Unnamed (45.3019, -121.8202); Zigzag River (45.3092, -121.8642).

(iii) *Upper Sandy River Watershed 1708000103*. Outlet(s) = Sandy River (Lat 45.3489, Long -121.9442) upstream to endpoint(s) in: Clear Creek (45.3712, -121.9246); Clear Fork Sandy River (45.3994, -121.8525); Horseshoe Creek (45.3707, -121.8936); Lost Creek (45.3709, -121.8150); Sandy River (45.3899, -121.8620).

(iv) *Middle Sandy River Watershed 1708000104*. Outlet(s) = Sandy River (Lat 45.4464, Long -122.2459) upstream to endpoint(s) in: Alder Creek (45.3776, -122.0994); Bear Creek (45.3368, -121.9265); Cedar Creek (45.4087, -122.2617); North Boulder Creek (45.3822, -122.0168); Sandy River (45.3489, -121.9442).

(v) *Bull Run River Watershed 1708000105*. Outlet(s) = Bull Run River (Lat 45.4464, Long -122.2459) upstream to endpoint(s) in: Bull Run River (45.4455, -122.1561); Little Sandy Creek (45.4235, -122.1975).

(vi) *Columbia Gorge Tributaries Watershed 1708000107*. Outlet(s) = Columbia River (Lat 45.5735, Long -122.3945) upstream to endpoint(s) in: Bridal Veil Creek (45.5542, -122.1793); Columbia River (45.6447, -121.9395); Coopey Creek (45.5656, -122.1671); Government Cove (45.5948, -122.0630); Hamilton Creek (45.6414, -121.9764); Hardy Creek (45.6354, -121.9987); Horsetail Creek (45.5883, -122.0675); Latourell Creek (45.5388, -122.2173); McCord Creek (45.6115, -121.9929); Moffett Creek (45.6185, -121.9662); Multnomah Creek (45.5761, -122.1143); Oneonta Creek (45.5821, -122.0718); Tanner Creek (45.6264, -121.9522); Turnaft Creek (45.6101, -122.0284); Unnamed (45.5421, -122.2624); Unnamed (45.5488, -122.3504); Unnamed (45.6025, -122.0443); Unnamed (45.6055, -122.0392); Unnamed (45.6083, -122.0329); Unnamed (45.6118, -122.0216); Unnamed (45.6124, -122.0172); Unnamed (45.6133, -122.0055); Wahkeena Creek (45.5755, -122.1266); Young Creek (45.5480, -122.1997).

(vii) *Lower Sandy River Watershed 1708000108*. Outlet(s) = Sandy River

(Lat 45.5680, Long -122.4023) upstream to endpoint(s) in: Beaver Creek (45.5258, -122.3822); Gordon Creek (45.4915, -122.2423); Sandy River (45.4464, -122.2459); Trout Creek (45.4844, -122.2785); Unnamed (45.5542, -122.3768); Unnamed (45.5600, -122.3650).

(3) Unit 3. Lewis Subbasin 17080002—(i) *East Fork Lewis River Watershed 1708000205*. Outlet(s) = East Fork Lewis River (Lat 45.8664, Long -122.7189) upstream to endpoint(s) in: East Fork Lewis River (45.8395, -122.4463).

(ii) *Lower Lewis River Watershed 1708000206*. Outlet(s) = Lewis River (Lat 45.8519, Long -122.7806) upstream to endpoint(s) in: Cedar Creek (45.9049, -122.3684); Chelatchie Creek (45.9169, -122.4130); Johnson Creek (45.9385, -122.6261); Lewis River (45.9570, -122.5550); Pup Creek (45.9391, -122.5440); Unnamed (45.8882, -122.7412); Unnamed (45.9153, -122.4362).

(4) Unit 4. Lower Columbia/Clatskanie Subbasin 17080003—(i) *Kalama River Watershed 1708000301*. Outlet(s) = Burris Creek (45.8926, -122.7892); Kalama River (46.0340, -122.8695) upstream to endpoint(s) in: Arnold Creek (46.0463, -122.5938); Burris Creek (45.9391, -122.7780); Elk Creek (46.0891, -122.5117); Gobar Creek (46.0963, -122.6042); Hatchery Creek (46.0459, -122.8027); Kalama River (46.1109, -122.3579); Little Kalama River (45.9970, -122.6939); North Fork Kalama River (46.1328, -122.4118); Wild Horse Creek (46.0626, -122.6367).

(ii) *Clatskanie River Watershed 1708000303*. Outlet(s) = Clatskanie River (Lat 46.1398, Long -123.2303) upstream to endpoint(s) in: Clatskanie River (46.0435, -123.0829); Merrill Creek (46.0916, -123.1727); Perkins Creek (46.0826, -123.1678).

(iii) *Skamokawa/Elochoman Watershed 1708000305*. Outlet(s) = Elochoman River (Lat 46.2269, Long -123.4040); Skamokawa Creek (46.2677, -123.4562); Unnamed (46.2243, -123.3975) upstream to endpoint(s) in: Beaver Creek (46.2256, -123.3071); Elochoman River (46.3503, -123.2428); Falk Creek (46.2954, -123.4413); Left Fork Skamokawa Creek (46.3249, -123.4538); McDonald Creek (46.3398, -123.4116); Standard Creek (46.3292, -123.3999); West Fork Elochoman River (46.3211, -123.2605); West Fork Skamokawa Creek (46.2871, -123.4654); Wilson Creek (46.2970, -123.3434).

(iv) *Plympton Creek Watershed 1708000306*. Outlet(s) = Westport Slough (Lat 46.1434, Long -123.3816)

upstream to endpoint(s) in: Plympton Creek (46.1261, -123.3842); Westport Slough (46.1195, -123.2797).

(5) Unit 5. Upper Cowlitz Subbasin 17080004—(i) *Headwaters Cowlitz River 1708000401*. Outlet(s) = Cowlitz River (Lat 46.6580, Long -121.6032) upstream to endpoint(s) in: Clear Fork Cowlitz River (46.6858, -121.5668); Muddy Fork Cowlitz River (46.6994, -121.6169); Ohanapecosh River (46.6883, -121.5809).

(ii) *Upper Cowlitz River Watershed 1708000402*. Outlet(s) = Cowlitz River (Lat 46.5763, Long -121.7051) upstream to endpoint(s) in: Cowlitz River (46.6580, -121.6032).

(iii) *Cowlitz Valley Frontal Watershed 1708000403*. Outlet(s) = Cowlitz River (Lat 46.4765, Long -122.0952) upstream to endpoint(s) in: Cowlitz River (46.5763, -121.7051); Silver Creek (46.5576, -121.9178).

(iv) *Upper Cispus River Watershed 1708000404*. Outlet(s) = Cispus River (Lat 46.4449, Long -121.7954) upstream to endpoint(s) in: Cispus River (46.3410, -121.6709); East Canyon Creek (46.3454, -121.7031); North Fork Cispus River (46.4355, -121.654).

(v) *Lower Cispus River Watershed 1708000405*. Outlet(s) = Cispus River (Lat 46.4765, Long -122.0952) upstream to endpoint(s) in: Cispus River (46.4449, -121.7954); McCoy Creek (46.3892, -121.8190); Yellowjacket Creek (46.3871, -121.8335).

(6) Unit 6. Cowlitz Subbasin 17080005—(i) *Tilton River Watershed 1708000501*. Outlet(s) = Tilton River (Lat 46.5432, Long -122.5319) upstream to endpoint(s) in: Tilton River (46.5992, -122.2352).

(ii) *Riffe Reservoir Watershed 1708000502*. Outlet(s) = Cowlitz River (Lat 46.5033, Long -122.5870) upstream to endpoint(s) in: Cowlitz River (46.4765, -122.0952).

(iii) *Jackson Prairie Watershed 1708000503*. Outlet(s) = Cowlitz River (Lat 46.3678, Long -122.9337) upstream to endpoint(s) in: Bear Creek (46.4215, -122.9224); Blue Creek (46.4885, -122.7253); Cowlitz River (46.5033, -122.5870); Lacamas Creek (46.5118, -122.8113); Mill Creek (46.4701, -122.8557); Mill Creek (46.5176, -122.6209); Otter Creek (46.4800, -122.6996); Salmon Creek (46.4237, -122.8400); Skook Creek (46.5035, -122.7556).

(iv) *North Fork Toutle River Watershed 1708000504*. Outlet(s) = North Fork Toutle River (Lat 46.3669, Long -122.5859) upstream to endpoint(s) in: North Fork Toutle River (46.3718, -122.5847).

(v) *Green River Watershed 1708000505*. Outlet(s) = Green River

(Lat 46.3718, Long -122.5847) upstream to endpoint(s) in: Cascade Creek (46.3924, -122.3530); Devils Creek (46.3875, -122.5113); Elk Creek (46.3929, -122.3224); Green River (46.3857, -122.1815); Miners Creek (46.3871, -122.2091); Shultz Creek (46.3744, -122.2987); Unnamed (46.3796, -122.3632).

(vi) *South Fork Toutle River Watershed 1708000506*. Outlet(s) = South Fork Toutle River (Lat 46.3282, Long -122.7215) upstream to endpoint(s) in: Johnson Creek (46.3100, -122.6338); South Fork Toutle River (46.2306, -122.4439); Studebaker Creek (46.3044, -122.6777).

(vii) *East Willapa Watershed 1708000507*. Outlet(s) = Cowlitz River (Lat 46.2660, Long -122.9154) upstream to endpoint(s) in: Arkansas Creek (46.3275, -123.0123); Baxter Creek (46.3034, -122.9709); Brim Creek (46.4263, -123.0139); Campbell Creek (46.3756, -123.0401); Cowlitz River (46.3678, -122.9337); Delameter Creek (46.2495, -122.9916); Hemlock Creek (46.2585, -122.7269); Hill Creek (46.3724, -122.9211); King Creek (46.5076, -122.9885); Monahan Creek (46.2954, -123.0286); North Fork Toutle River (46.3669, -122.5859); Olequa Creek (46.5174, -122.9042); Stillwater Creek (46.3851, -123.0478); Sucker Creek (46.2628, -122.8116); Unnamed (46.5074, -122.9585); Unnamed (46.5405, -122.9090); Wyant Creek (46.3424, -122.6302).

(viii) *Coweeman Watershed 1708000508*. Outlet(s) = Cowlitz River (Lat 46.0977, Long -122.9141); Owl Creek (46.0771, -122.8676) upstream to endpoint(s) in: Baird Creek (46.1704, -122.6119); Coweeman River (46.1505, -122.5792); Cowlitz River (46.2660, -122.9154); Leckler Creek (46.2092, -122.9206); Mulholland Creek (46.1932, -122.6992); North Fork Goble Creek (46.1209, -122.7689); Ostrander Creek (46.2095, -122.8623); Owl Creek (46.0914, -122.8692); Salmon Creek (46.2547, -122.8839); South Fork Ostrander Creek (46.1910, -122.8600); Unnamed (46.0838, -122.7264).

(7) Unit 7. Lower Columbia Subbasin 17080006—(i) *Big Creek Watershed 1708000602*. Outlet(s) = Bear Creek (Lat 46.1719, Long -123.6642); Big Creek (46.1847, -123.5943); Blind Slough (46.2011, -123.5822); John Day River (46.1820, -123.7392) upstream to endpoint(s) in: Bear Creek (46.1181, -123.6388); Big Creek (46.1475, -123.5819); Gnat Creek (46.1614, -123.4813); John Day River (46.1763, -123.7474).

(ii) *Grays Bay Watershed 1708000603*. Outlet(s) = Crooked Creek (Lat 46.2962, Long -123.6795); Deep River (46.3035,

-123.7092); Grays River (46.3035, -123.6867); Sisson Creek (46.3011, -123.7237); Unnamed (46.3042, -123.6870) upstream to endpoint(s) in: Crooked Creek (46.3033, -123.6222); East Fork Grays River (46.4425, -123.4081); Fossil Creek (46.3628, -123.5530); Grays River (46.4910, -123.4334); Hull Creek (46.3725, -123.5866); Johnson Canyon (46.3699, -123.6659); Klints Creek (46.3562, -123.5675); Malone Creek (46.3280, -123.6545); Mitchell Creek (46.4512, -123.4371) South Fork Grays River (46.3813, -123.4581); Sweigiler Creek (46.4195, -123.5375); Unnamed (46.3283, -123.7376); Unnamed (46.3651, -123.6839); Unnamed (46.4701, -123.4515); West Fork Grays River (46.4195, -123.5530).

(8) Unit 9. Clackamas Subbasin 17090011—*Lower Clackamas River Watershed 1709001106*. Outlet(s) = Clackamas River (Lat 45.3719, Long -122.6071) upstream to endpoint(s) in: Clackamas River (45.2440, -122.2798); Clear Creek (45.3568, -122.4781); Deep Creek (45.3916, -122.4028); Richardson Creek (45.3971, -122.4712); Rock Creek (45.4128, -122.5043).

(9) Unit 10. Lower Willamette Subbasin 17090012—(i) *Johnson Creek Watershed 1709001201*. Outlet(s) = Willamette River (Lat 45.4423, Long -122.6453) upstream to endpoint(s) in: Crystal Springs Creek (45.4770, -122.6403); Kellogg Creek (45.4344, -122.6314); Tryon Creek (45.4239, -122.6595); Unnamed (45.4002, -122.6423); Willamette River (45.3719, -122.6071).

(ii) *Scappoose Creek Watershed 1709001202*. Outlet(s) = Multnomah Channel (Lat 45.8577, Long -122.7919) upstream to endpoint(s) in: Cunningham Slough (45.8250, -122.8069); Multnomah Channel (45.6188, -122.7921); North Scappoose Creek (45.8014, -122.9340).

(iii) *Columbia Slough/Willamette River Watershed 1709001203*. Outlet(s) = Willamette River (Lat 45.6530, Long -122.7646) upstream to endpoint(s) in: Bybee/Smith Lakes (45.6189, -122.7333); Columbia Slough (45.5979, -122.7137); Willamette River (45.4423, -122.6453).

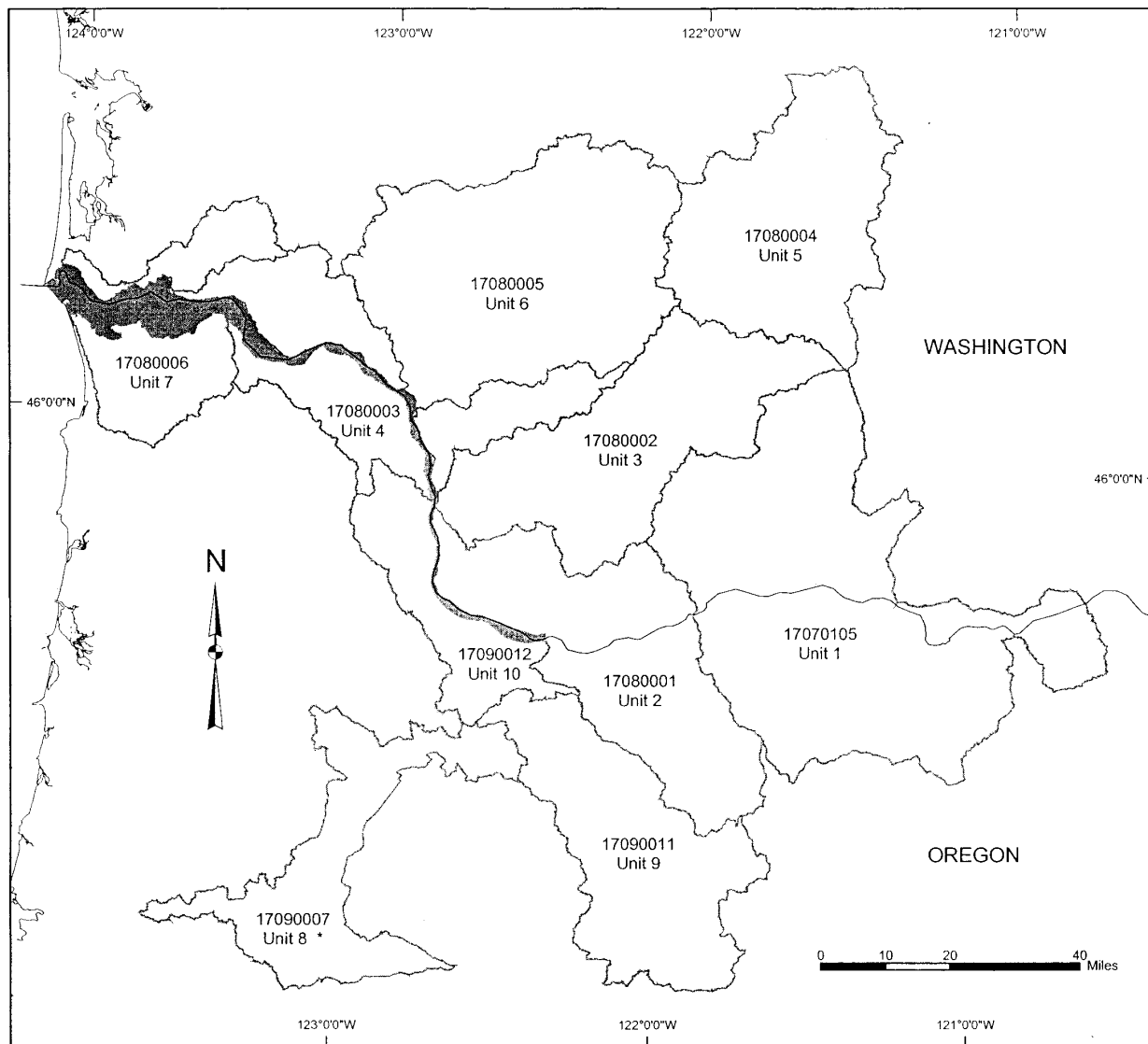
(10) Unit 11. Lower Columbia River Corridor—(i) *Lower Columbia River Corridor*. Outlet(s) = Columbia River (Lat 46.2485, Long -124.0782) upstream to endpoint(s) in: Columbia River (45.5709, -122.4021).

(11) Maps of proposed critical habitat for the Lower Columbia River chinook salmon ESU follow:



BILLING CODE 3510-22-P



### Map of the Lower Columbia River Chinook Salmon ESU

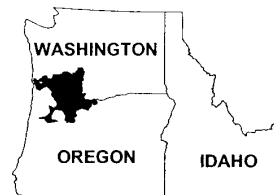


#### Legend

- State Boundaries
-  Water Bodies
-  Subbasin Boundaries

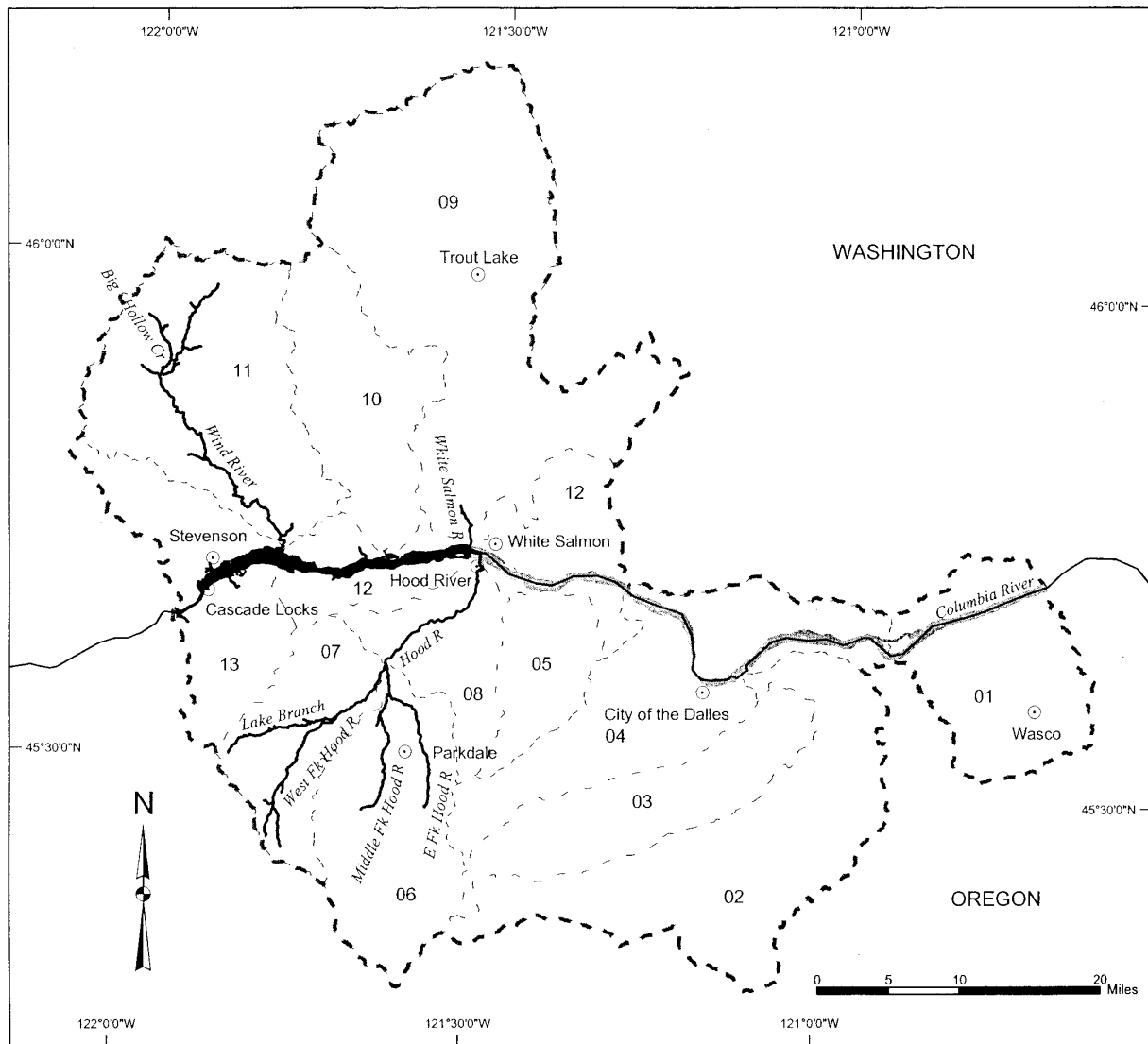
\* All habitat areas in unit are proposed for exclusion

#### Area of Detail



**Proposed Critical Habitat for the  
Lower Columbia River Chinook Salmon ESU**

**MIDDLE COLUMBIA / HOOD SUBBASIN  
17070105, Unit 1**



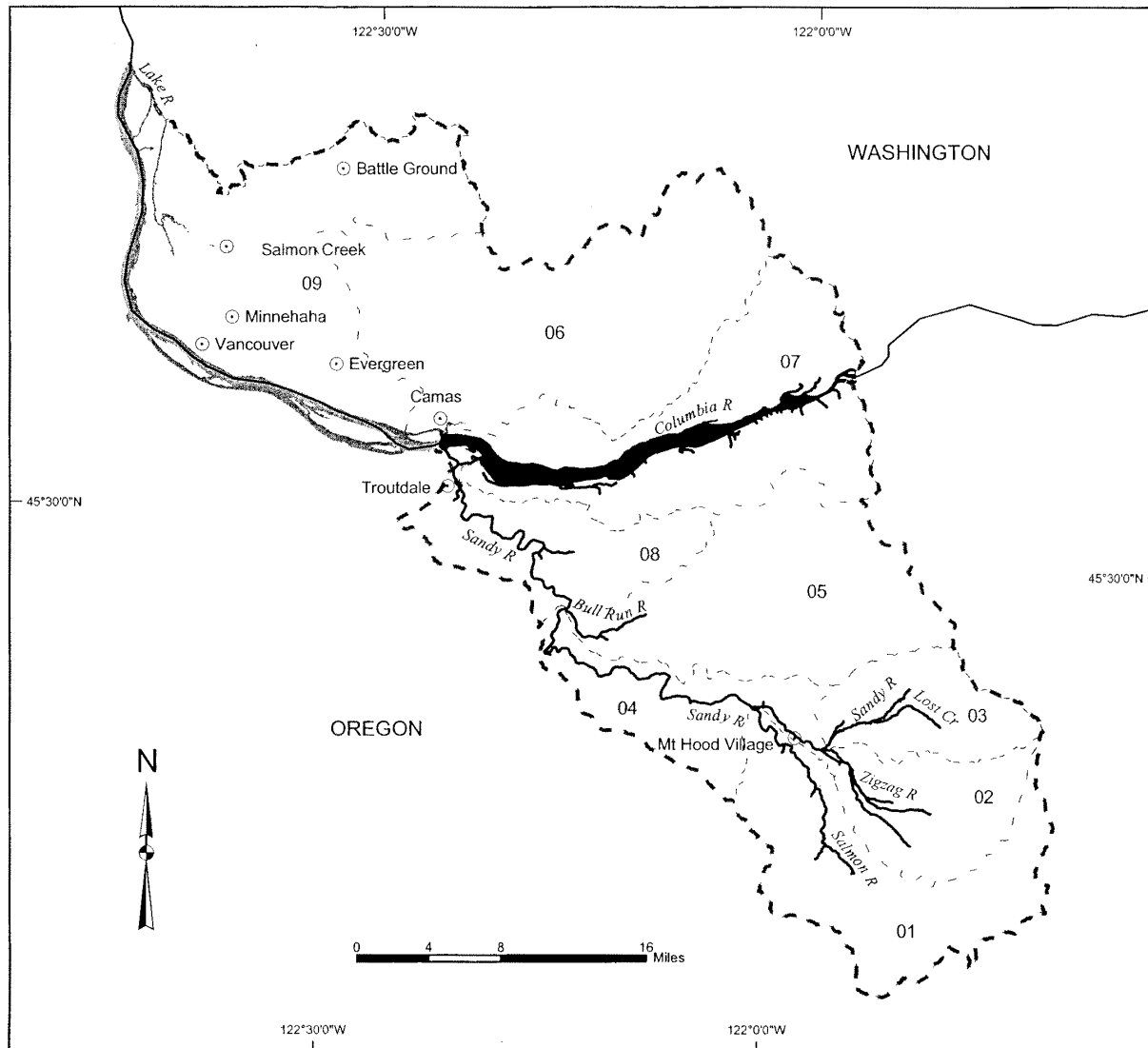
**Legend**

- Cities / Towns
- ~ Proposed Critical Habitat
- State Boundary
- Water Bodies
- Subbasin Boundary
- Watershed Boundaries

01 - 13 = Watershed code - last 2 digits of 17070105xx

**Area of Detail**

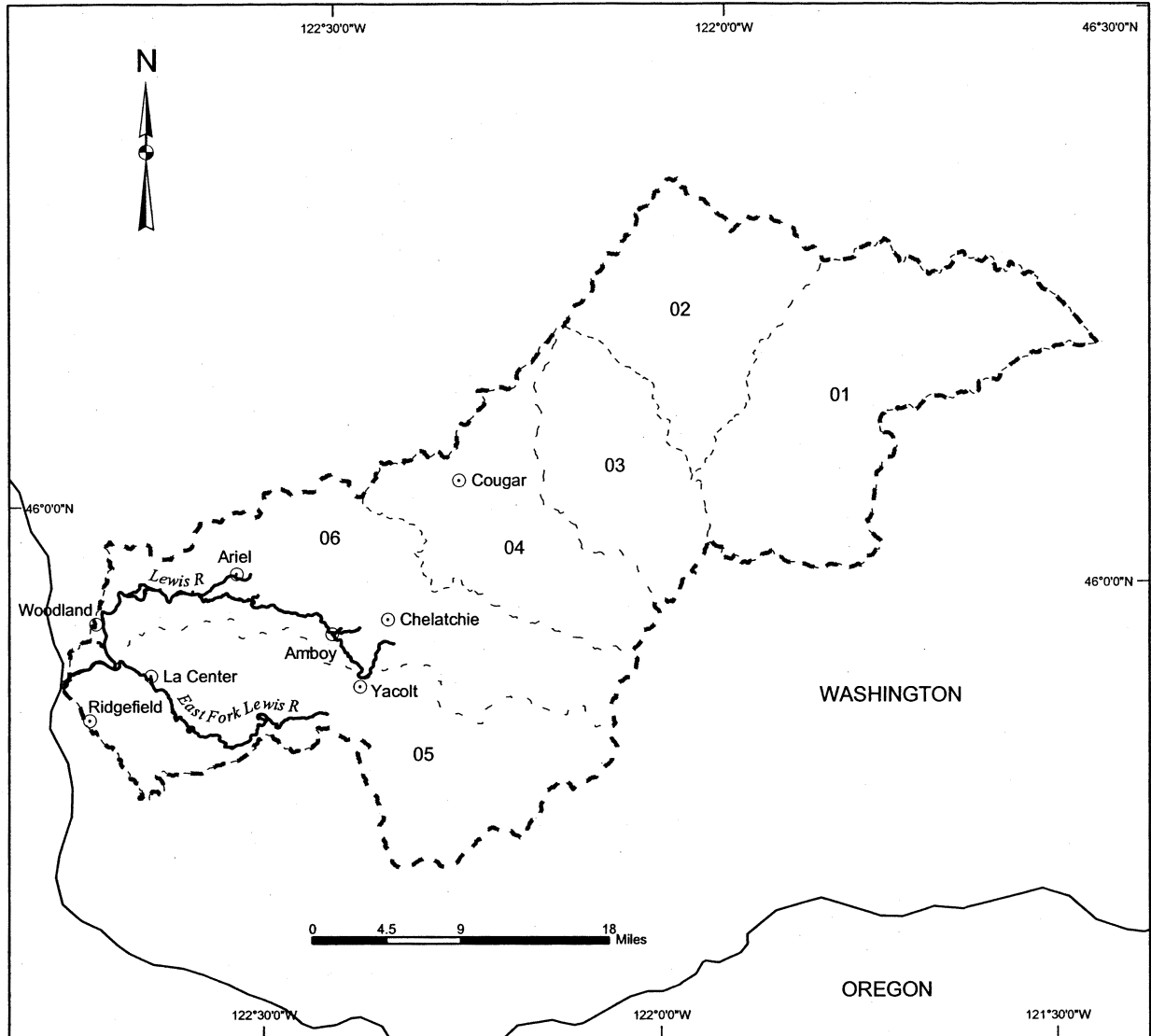


**Proposed Critical Habitat for the  
Lower Columbia River Chinook Salmon ESU****LOWER COLUMBIA / SANDY SUBBASIN  
17080001, Unit 2****Legend**

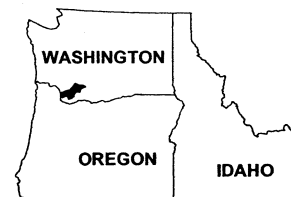
- Cities / Towns
- ~ Proposed Critical Habitat
- State Boundary
- Water Bodies
- Subbasin Boundary
- Watershed Boundaries

01 - 09 = Watershed code - last 2 digits of 17080001xx

**Area of Detail**

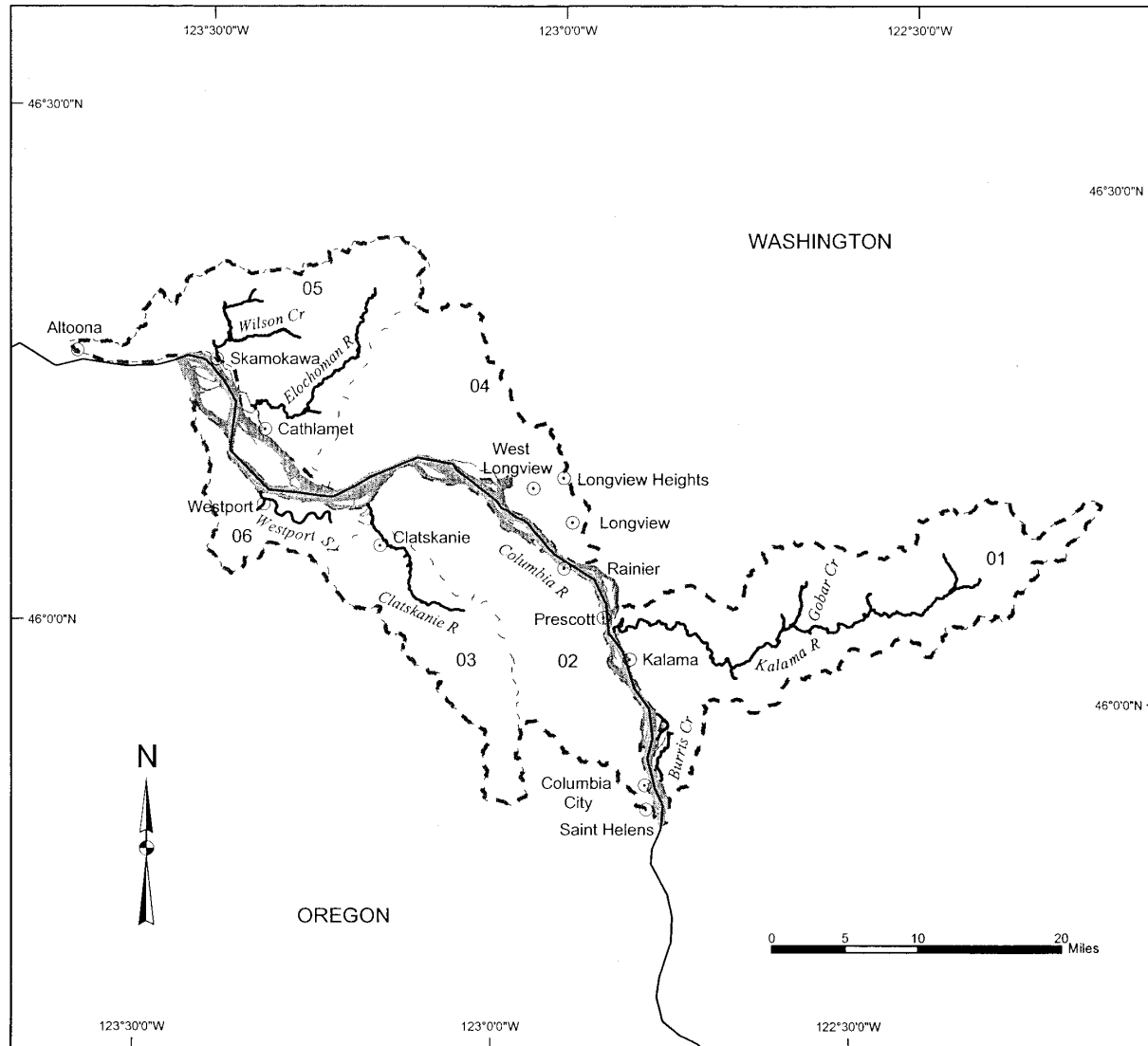
**Proposed Critical Habitat for the  
Lower Columbia River Chinook Salmon ESU****LEWIS SUBBASIN  
17080002, Unit 3****Legend**

- Cities / Towns
- State Boundary
- ~ Proposed Critical Habitat
- - - Subbasin Boundary
- - - Watershed Boundaries

**01 - 05 = Watershed code - last 2 digits of 17080002xx****Area of Detail**

**Proposed Critical Habitat for the  
Lower Columbia River Chinook Salmon ESU**

**LOWER COLUMBIA / CLATSKANIE SUBBASIN  
17080003, Unit 4**



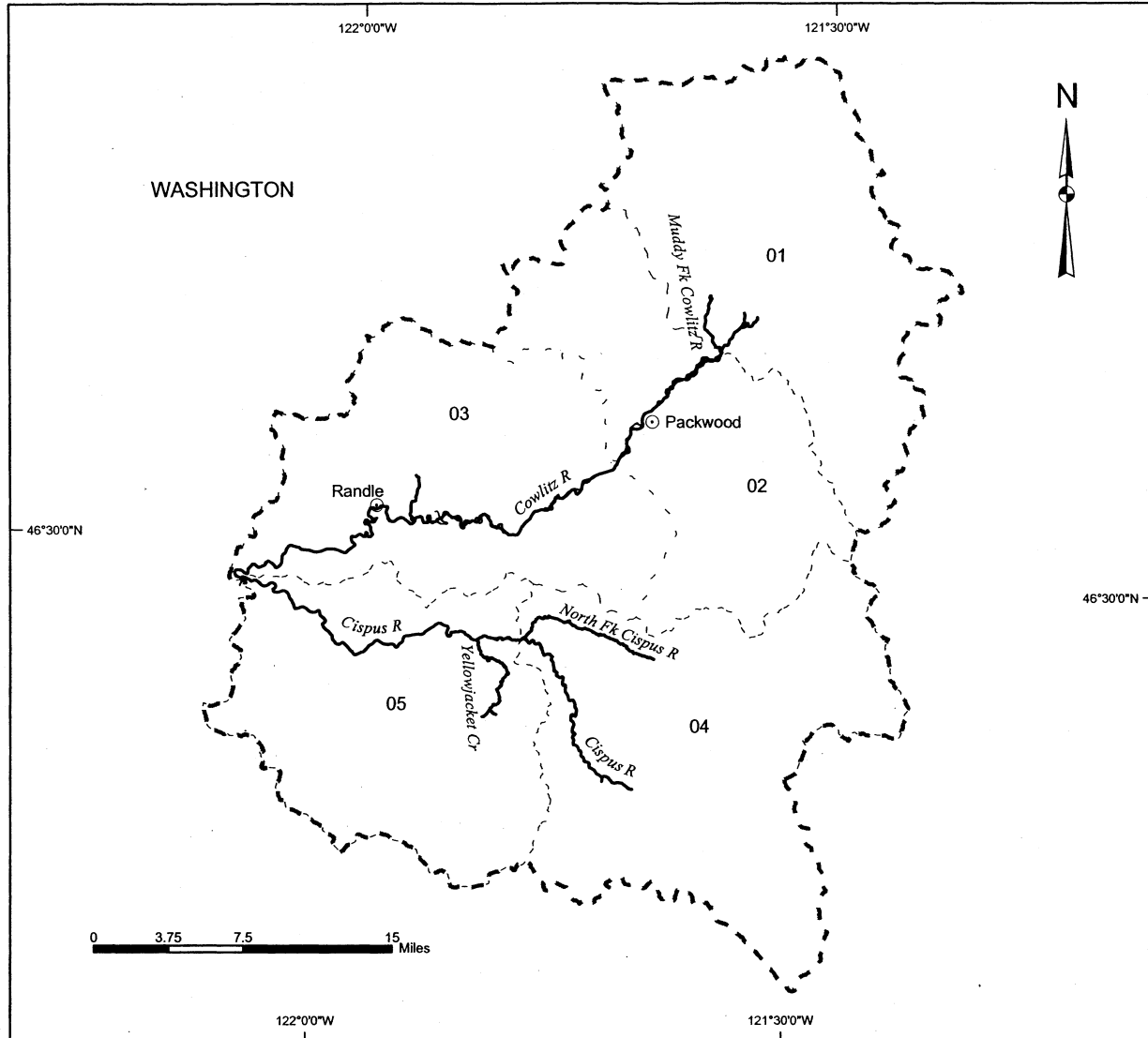
**Legend**

- Cities / Towns
- State Boundary
- ~ Proposed Critical Habitat
- Water Bodies
- - - Subbasin Boundary
- - - Watershed Boundary

01 - 06 = Watershed code - last 2 digits of 17080003xx

**Area of Detail**



**Proposed Critical Habitat for the  
Lower Columbia River Chinook Salmon ESU****UPPER COWLITZ SUBBASIN  
17080004, Unit 5****Legend**

- Cities / Towns
  - Proposed Critical Habitat
  - - - Subbasin Boundary
  - · · Watershed Boundaries
- 01 - 05 = Watershed code - last 2 digits of 17080004xx

**Area of Detail**